Volume 168 No. 19

Oil, Paint and Drug Reporter

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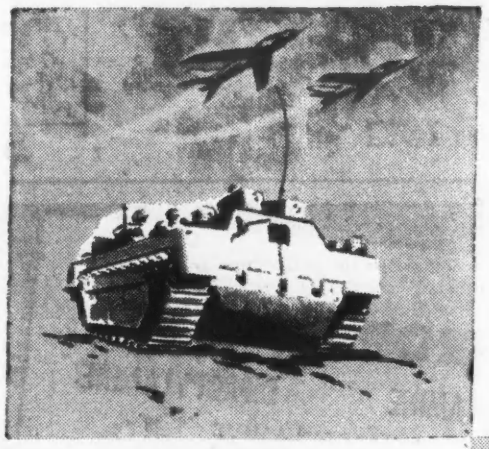

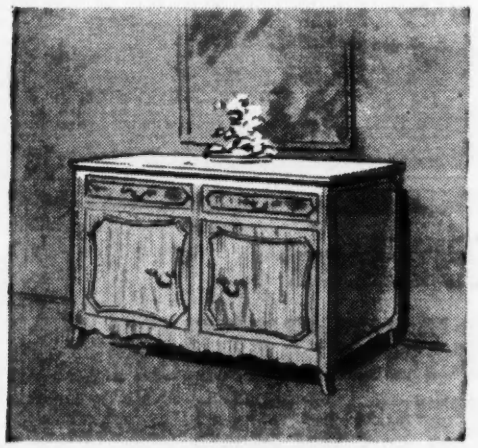

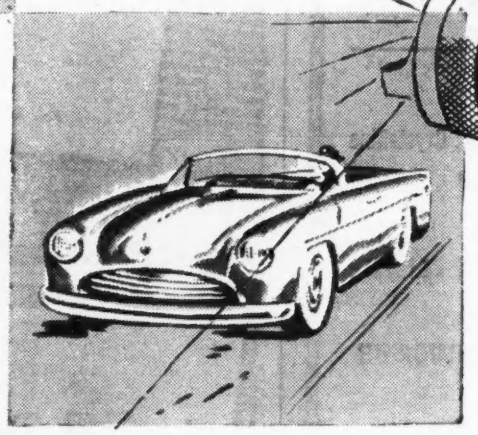

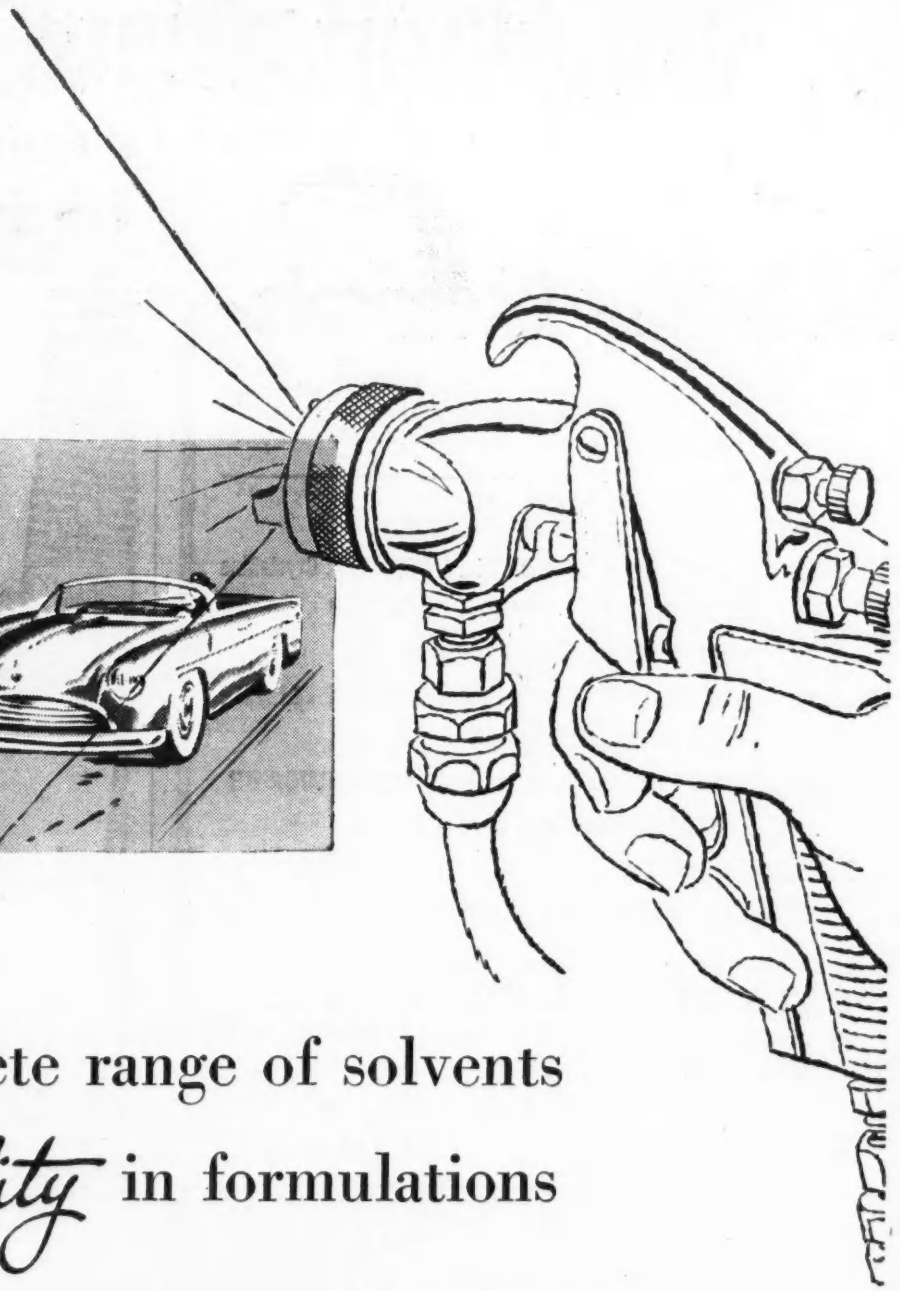

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Volume 168 No. 19 | 30 Church Street, New York 7, N. Y. | November 7, 1955

Pesticides Law Dates Extended

The deadline dates when chemical pesticides must comply fully with the requirements of the Miller pesticide law have been extended until January 22, 1956, and March 1, 1956, as regards certain pesticides for certain specified uses, the Food and Drug Administration announced last week.

The extension was granted because the agency has not yet had sufficient time to process petitions currently on file for establishment of residue tolerances or for exemption from tolerances, and to permit additional data to be obtained with respect to residues of pesticides that remain from post-harvest application of the chemicals.

In extending the deadline date, FDA emphasized that it applies only in those cases where a tolerance or exemption from a tolerance has not previously been established or approved. The chemical pesticides exempted from compliance with the law until January 22 as respects to certain uses are:

Aldrin, allethrin, calcium cyanide, chlordane, dieldrin, endrin, EPN, ethylene dibromide, "Ferbam," hydrocyanic acid, lindane, methoxychlor, methyl bromide, parathion, phygon, piperonyl, butoxide, pyrethrins, toxaphene, "Zineb" and "Ziram."

Those pesticides exempted until March 1 for certain other uses are:—

Acrylonitrile, benzene hexachloride, butoxypolypropylene glycol, carbon bisulfide, carbon tetrachloride, chlordane, chloropicrin, copper carbonate (basic), DDT, ethylene dibromide, ethylene dichloride, sodium orthophenylphenate tetrahydrate, and trichloroethane.

Fluorine Chemicals Plant Will Be Built by Pennsalt

The addition of a large organic fluorine chemicals plant at Calvert City, Ky., will inaugurate the Pennsylvania Salt Manufacturing Company's projected expansion program, William P. Drake, president, has announced.

With construction scheduled to begin at once, the new unit will become a major component of Pennsalt's closely integrated chlorine-fluorine production facilities on the Tennessee River. Full scale operations are expected to begin in 1956. Its initial products will serve the refrigerant and aerosol propellant fields. Future products from this plant and related facilities at the same location are expected to find uses in new and improved plastics, lubricants, metal fluxes, anesthetics, ceramics, agricultural chemicals and new applications in the field of atomic energy.

Chester M. Brown has been named president of General Chemical division, Allied Chemical & Dye Corporation, New York, succeeding Mark M. Biddison, who has headed the division since 1951.

Nobel Chemistry, Physics Prizes to US

Dr. Vincent du Vigneaud of Cornell University Medical College last week won the 1955 Nobel prize in chemistry for his work on oxytocin and vasopressin, two hormones that aid in childbirth and keep close check on such vital organs as the kidneys.

The Nobel award in physics was made jointly to Dr. Willis E. Lamb of Stanford University and Dr. Polykarp Kusch of Columbia University for work relating to atomic measurements. The two physicists, who will split the $36,720, were cited for work correcting an error made by Dr. P. A. M. Dirac, a British scientist, and winner of the 1933 Nobel prize in physics.

This year's awards will be presented December 10 at the Royal Swedish Academy of Science in Stockholm by King Gustaf Adolf.

Montan Wax From Europe Being Dumped, Gov't Claims

The Treasury Department stated last week that it has found that imports of montan wax in crude form from East Germany and Czechoslovakia are being sold in the United States at less than fair value, which constitutes dumping.

Before any penalties can be imposed on the imports, however, the Tariff Commission must make a finding that the sales are injuring or are likely to injure the domestic industry.

Chemical Duty Cuts Will Shut US Plants, Industry Holds

Further tariff cuts could mean the difference between a profitable and a losing operation, chemical industry representatives argued last week in hearings before the Tariff Commission and the Committee for Reciprocity Information. With chemical producers already beginning to feel the impact of foreign imports, duty concessions, it was contended, would inevitably mean US plant shutdowns—and the country can ill afford the closing of facilities that would be essential for national defense.

The hearings were for the purpose of gathering industry views on the fourth-round tariff reductions scheduled to be negotiated at Geneva early next year between the United States and twenty-five other countries who are members of the General Agreement on Tariffs and Trade. Besides nearly sixty items on the chemical schedule, there are several hundred other articles being considered for tariff negotiation.

Cuts Up to 15 Percent Possible

Under the authority contained in the latest extension of the trade agreements act, reductions in duties up to 15 percent can be negotiated with not more than 5 percent of the reduction becoming effective each year over a three-year period. No increase may become effective after July 1, 1958, however.

In a few instances, witnesses appealed to the agencies to seek a reduction of specific tariffs imposed by foreign governments on American products. Such was the case with bleached shellac. Herbert M. Simon, counsel for the American Bleached Shellac Manufacturers Association and the United States Shellac Importers Association, protested a 10 percent tax now imposed by Canada on bleached shellac imports.

He told the Committee for Reciprocity Information that there is no need for the Canadian tax, either as a revenue measure, or as protection for the Canadian shellac industry. The Canadian industry has a price advantage of from 8 cents to 12 cents a pound over the American product, and the 10 percent duty is unnecessary, he said.

The committee also heard testimony from Paul H. Bennett of the Dobeckmun

—Continued on page 86

Isosebacic Acid Plant Is Projected by USI

The first commercial plant in the world for the production of isomers of sebacic acid, known as "USI Isosebacic" acid, will be built at Tuscola, Ill., according to Dr. Robert E. Hulse, vice-president and general manager of U. S. Industrial Chemicals Company, New York, a division of National Distillers Products Corporation. Initial production capacity of the plant will be 10,000,000 pounds per year. Completion is scheduled for early in 1957.

"USI Isosebacic" acid is a mixture of isomers of sebacic acid in approximately the following proportions: — 2-ethyl suberic acid, 72-80 percent; 2,4-diethyl adipic acid, 12-18 percent, and sebacic acid, 6-10 percent.

The new product is the result of more than three years of research which began under the auspices of a National Distillers' fellowship at the University of Cincinnati and progressed through the company's research laboratory. For the last two years, "USI Isosebacic" acid has

—Continued on page 63

PHS, Hopkins Develop New Respiratory Vaccine

The Public Health Service and the Johns Hopkins University medical institutions last week jointly announced the development of an experimental vaccine that has been found to be successful in clinical trials against one type of common respiratory illness.

The research dealt with type 3 of the APC (adenoidal, pharyngeal, conjunctival) virus group which causes a five-day illness marked by fever, sore throat and conjunctivitis or "red eye," an illness which can be sporadic or occur in sharp outbreaks or epidemics.

The type 3 virus is one of nine viruses in the APC group and scientists plan further studies to develop an experimental vaccine against the entire group. Since the research is still in the preliminary stage and the vaccine is purely experimental, the scientists emphasized that there is no prospect for production of the vaccine in the near future.

Discount Case Appeal Filed by Justice Dep't

The Department of Justice last week appealed the adverse decision of the lower court in the so-called maximum quantity discount rule to the United States Court of Appeals for the District of Columbia.

The case involves the authority of the Federal Trade Commission to set maximum limits on the quantities of commodities which are subject to maximum discount. An attempt by the agency to apply the rule for the first time against the manufacturers of automobile tires was knocked down by the lower court (OPD, 9/12/55) on the grounds that the FTC had failed to support its order with proper findings of fact.

Cornelius Products, Ziegler Consolidate Wax Operations

Cornelius Products Company, New York, and G. S. Ziegler & Co., also New York, have announced that the wax businesses of both firms have been joined and are operating as one. The new firm will be known as Cornelius Wax Refining, a division of G. S. Ziegler & Co., with headquarters at 99 Church street, New York.

General Wax Refining Company and General Wax Refining Canada, Ltd., wholly-owned subsidiaries of Cornelius Products, are included in the merger. Ziegler will continue as heretofore its gilsonite and chemical plant activities.

Bareco Wax Business Sale To Petrolite Is Approved

Bareco Oil Company, Tulsa, Okla., has voted approval of a proposed sale of the company's Barnsdall, Okla., wax refinery and its wax business to Petrolite Corporation for Petrolite capital stock. Directors of Petrolite have also approved the proposed transaction, which now awaits final authorization by stockholders of the two companies.

The sale, if completed, will become effective December 1. The wax operations of the two companies will be combined under the name of Bareco Wax Company, a division of Petrolite Corporation. This division will continue the production of the full line of Bareco microcrystalline waxes in the Barnsdall refinery. It will also continue operation of Petrolite's present facilities for the manufacture of high melting point hydrocarbon waxes at Kilgore, Tex.

American Cholesterol Tells Of Plans for New Facility

American Cholesterol Products, Inc., is erecting a 35,000 square foot plant and laboratory of modern design on a twenty acre site in Edison Township, N. J.

The new plant will consist of a 5,000 square foot laboratory and office section adjoining a twenty-three-foot high, single story manufacturing building. An additional building in the rear of the site will be used for solvent storage. The company expects to be using the new plant by February.

Velsicol Unit Razed by Blast

An experimental insecticide unit at Velsicol Chemical Corporation's Memphis, Tenn., plant was completely destroyed by an explosion last week. E. T. Collinsworth, jr., executive vice-president of the company, said that "commercial production of Velsicol insecticides—chlordan, heptachlor and endrin—would not be affected."

Antibiotics Conclave Lifts Lid On New Drug Discoveries

The lid was lifted on a host of new antibiotics at last week's third annual Symposium on Antibiotics in Washington.

The three-day parley, sponsored by Food and Drug Administration's division of antibiotics, heard German scientists report the development of a new form of streptomycin which, they said, is much safer than the type in general use today.

The German streptomycin, which has not yet been tested in this country, is made with pantothenic acid and is called streptomycin pantothenate. Streptomycin in general use now is purified with sulfuric acid and is called streptomycin sulfate.

The Germans claimed their stroptomycin eliminates deafness, dizziness and other side reactions that have long been a serious limitation on the prolonged use of ordinary streptomycin.

Synergistic Antibiotic Reported

Discovery of "Synergistin, a new antibiotic containing two active fractions that appear to have synergistic action, was reported by researchers of Chas. Pfizer & Co., Brooklyn, N. Y.

Dr. Ben A. Sobin said that during the course of screening soil samples for antibiotics he discovered an organism which produced a substance called "Synergistin" that was effective in inhibiting the growth of certain bacteria.

Dr. Walter D. Celmer of Pfizer purified the antibiotic material and found that there were two active fractions in the crude antibiotic substance. He obtained pure crystals of the two antibiotics and tested them against various bacteria.

It was later found that combinations of the two fractions (called "Synergistin A" and "Synergistin B") were far more effective against disease-causing microorganism than either of the individual antibiotics used singly.

Upjohn Has New Drug

Upjohn Company, Kalamazoo, Mich., announced the discovery of "Albamycin," which in preliminary clinical trials has reportedly proven effective against a wide variety of human infections.

Dr. E. Gifford Upjohn, company president, said the new drug was discovered and developed by a research team in the laboratories of the Upjohn Company from soil samples collected in Queens Village, N. Y.

The microbes which produce the antibiotic, he said, are a new species which

—Continued on page 41

Chemicals Packaging, Shipping Rules Are Changed by ICC

Regulations of the Interstate Commerce Commission covering the transportation of explosives and other dangerous articles have been amended in a number of material respects to meet latest developments of the chemical industry regarding the packaging and shipment of chemical products. The changes are to become effective December 31. Among the many changes made was authorization to use new forms of caution labels for shipments of explosives and dangerous articles interchanged with carriers by air. The labels are symbolic of the several types of materials; a flame for flammable liquids and solids, an exploding bomb for explosives, skull and cross bones for poisons, etc.

Dr. Edgar C. Britton, director of the Edgar C. Britton Research Laboratory of Dow Chemical Company, Midland, Mich., and past president of the American Chemical Society, has been chosen to receive the 1956 Perkin medal of the American section, Society of Chemical Industry.

A number of changes have to do with the type of tankcars to be used for certain materials while others provide for new types of containers for smaller quantities of the materials being shipped. The list of explosives and other dangerous articles was extended to include iodine monochloride as a corrosive liquid requiring a white label and limited to single express shipments of one quart; and to include methyl iso-propenyl ketone, inhibited, as a flammable liquid requiring a red label and limited to ten-gallon shipments in one outside container.

Some of the Changes

Among the many changes provided for were the following:—

Periodic retests of metal tanks, safety valves, and heater systems, except those in chlorine service and except tanks made to specifications ICC-106A500, 106A500X, 106A800, 106A800X, 106A800NCI, 107A, or 110A500W may now be made at any time during the calendar year the retest falls due instead of the specific date it falls due.

MC320 cargo tanks may now be used for the same liquefied gases transported in MC330 cargo tanks.

Chlorine may be transported in cargo tank motor vehicles.

Certain explosives and explosive ingredients and blasting caps may be packaged in specification 12H fiberboard boxes in addition to other types of containers.

Paints and related materials specified in section 73.128 of the regulations in glass or earthenware containers of not over one quart capacity, or metal containers or not over five gallons capacity, packed in

—Continued on page 55

Dow to Build Two More 'Styrofoam' Units

Dow Chemical Company last week announced plans for the immediate construction of two new plants for the production of "Styrofoam," a Dow plastic foam.

One unit will be located near Ironton, Ohio, on the Ohio River and will be known as the Hanging Rock plant. The other will be the Riverside plant at Riverside, Mo., on the Mississippi River, twenty-five miles south of St. Louis. Completion of both units is slated for the fall of next year.

Dow has two "Styrofoam" plants now in production at Midland, Mich., and Allyn's Point, Conn., and a third under construction at Torrance, Calif.

Wyandotte Elects Directors

Wyandotte Chemicals Corporation, Wyandotte, Mich., has elected Bert Cremers and Ford Ballantyne, jr., to its board of directors. Mr. Cremers is vice-president and general manager of the company's Michigan Alkali Division, while Mr. Ballantyne is vice-president and general manager of its J. B. Ford Division.

Union Carbide Nuclear Co. Makes Currie Vice-President

Dr. Lauchlin M. Currie has been appointed a vice-president of Union Carbide Nuclear Company, according to an announcement made by Kenneth Rush, president of that division of Union Carbide & Carbon Corporation. Dr. Currie had been vice-president of National Carbon Company, another division of Union Carbide. During the war years, he was associate director of war research for the Manhattan District Project at Columbia University.

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Diamond Acquiring Geigy Plant

Plans for Diamond Black Leaf Company, Cleveland, Ohio, to take over operation of the Des Moines, Iowa, pesticide processing plant of the Geigy Agricultural Chemicals Division of Geigy Chemical Corporation, New York, on December 1 were announced last week. The announcement was made jointly by Loren P. Scoville, president of Diamond Black Leaf, and Dr. George R. Ferguson, president of Geigy's Agricultural Chemicals Division.

Built in the fall of 1954 at a cost of $500,000 and put into operation early this year, the Des Moines plant produces insecticides and weed killers for distribution throughout the plains states of Ohio, Michigan, Indiana, Illinois, Kentucky, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Wyoming, Montana and Colorado.

Dr. Ferguson stated that this move is being made primarily in the interest of intensifying Geigy's activities in the marketing of DDT and methoxychlor and the further development and production of several outstanding new agricultural chemicals, products of the company's extensive long-range research program.

Diamond Black Leaf Company was formed in February of this year. The new firm, which absorbed the operations of the Black Leaf Products Division of Virginia-Carolina Chemical Corporation, Richmond, Va., manufactures and markets the "Black Leaf" line of insecticides, herbicides and fungicides.

Sodium Phosphate Increase Slated by Westvaco Jan. 1

Sodium phosphates have been advanced effective January 1, 1956, by Westvaco Mineral Products, New York, a division of Food Machinery & Chemical Corporation. Sodium tripolyphosphate and tetrasodium pyrophosphate have been increased 15 cents per hundred pounds across the board.

Anhydrous monosodium, disodium and trisodium phosphates were increased 20 cents per hundred pounds, as was sodium hexametaphosphate. Bulk prices on these products were rescheduled to list at 30 cents per hundred pounds below bag, carlot prices.

Schering, Merck Make Deal On Hormones for Arthritis

Schering Corporation of Bloomfield, N. J., and Merck & Co., Rahway, N. J., last week announced conclusion of patent cross-licensing agreements between the two companies covering the manufacture and sale of prednisone and prednisolone, the two new steroids used in the treatment of rheumatoid arthritis and other chronic diseases.

Stauffer Starts Building

Ground has been broken for the new addition to Stauffer Chemical Company's research center at Chauncey, N. Y. Adding over 8,000 square feet of chemical laboratory and office floor space, the addition will cost more than $250,000 and should be completed by July.

Paint Facilities' Closing Delayed for Further Probe

The Navy department's program for discontinuing the manufacture of paint at its Norfolk, Va., and Mare Island, Calif., plants, was shelved last week until next February to give the congressional appropriations committees more time to study the matter.

The house committee had asked the department two weeks ago not to terminate these operations and thirteen other commercial-type functions proposed to be discontinued until they could be reviewed next session.

The Week's Price Changes

Chrome Colors, Platinum, Sodium Sulfhydrate, Valonia Higher. Dried Blood, Copra, Caraway Seed, Tankage Lower.

Prices Advanced

Casein, Argentine, ½c. per lb. (p. 76).
Fenugreek seed, Indian, 1½c. per lb. (p. 64).
Morrocan, 1½c. per lb.
Fishmeal, $1 per ton (p. 47).
Fishscrap, $1 per ton (p. 47).
Ginger, Jamaica, No. 2, 4c. per lb. (p. 64).
No. 3, 4c. per lb.
Greases, ½c. per lb. (p. 81).
Green, chrome, CP, dark, light, medium blue content, 1-15%, 2c. per lb. (p. 76).
16-30%, 1c. per lb.
31-45%, 1c. per lb.
45-49%, 1c. per lb.
Mace, Siauw, siftings, 40c. per lb. (p. 64).
Nutmeg, East Indian, 90c. per lb. (p. 64).
West Indian, 11c. per lb.
Oil, castor, No. 1, Brazilian, ¼c. per lb. (p. 81).
Cottonseed, crude, ⅛c. per lb. (p. 81).
refd., ¼c. per lb.
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West Indian, $1 per lb.
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Soybean, crude, ¼c. per lb. (p. 81).
refd., ¼c. per lb.
Tung, ¼c. per lb. (p. 81).
Orange, chrome, 1c. per lb. (p. 76).
Molybdated, 1c. per lb.
Platinum, $6 per oz. (p. 38).
Potassium stannate, 0.4c. per lb. (p. 38).
Silicon tetrachloride, 2c. per lb. (p. 38).
Sodium stannate, 0.5c. per lb. (p. 38).
sulfhydrate, liq., $5 per ton (p. 38).
Stannic chloride, 0.6c. per lb. (p. 38).
Stanneus chloride, anhyd., 0.6c. per lb. (p. 38).
hydrous, cryst., ⅜c. per lb.
Sulfate, 0.6c. per lb.
Tallow, edible, ½c. per lb. (p. 81).
inedible, ⅛c. per lb.
Tin, ¼c. per lb. (p. 38).
Valonia beards, $7 per ton (p. 44).
Cups, $4 per ton.
Extract, ¼c. per lb.
Wax, candelilla, crude, 1c. per lb. (p. 81).
refd., 1c. per lb.
Carnauba, yellow, crude, 4c. to 5c. per lb. (p. 81).
Yellow, chrome, 1c. per lb. (p. 76).
Zinc (chromate), 1c. per lb.

Prices Reduced

Blood, dried, N. Y., 25c. per unit-ton (p. 47).
Caraway seed, Dutch, ½c. per lb. (p. 64).
Copra, $2.50 per ton (p. 81).
Oil, Cedarwood, 3c. per lb. (p. 64).
Chenopodium, 15c. per lb. (p. 64).
Coconut, crude, ¼c. per lb. (p. 81).
Oleo, ¼c. per lb. (p. 81).
Oleo stearine, ¼c. per lb. (p. 81).
Pepper, black, Malabar, 3c. per lb. (p. 64).
white, 1c. per lb.
Soybean meal, $1.50 per ton (p. 81).
Tankage, Chicago, 25c. per unit-ton (p. 47).
N. Y., 25c. per unit-ton.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100—1949 average)

Nov. 4, 1955	Oct. 28, 1955	Nov. 5, 1954
107.15	106.79	106.22

Oil, Paint and Drug Reporter, Vol. 168, No. 19, November 7, 1955. Published every Monday by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U. S. A. Subscription prices—United States and possessions, $5 a year; Canada and Newfoundland, $7; other countries, $10. Entered as second-class matter, January 15, 1884, at the New York Post Office under the act of March 3, 1879.
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Potash Shows Gain in Deliveries

During the first nine months of 1955, total deliveries by United States potash producers and importers amounted to 2,709,714 tons of potash salts containing 1,601,249 tons K_2O, an increase of 7 percent in salts and K_2O over the corresponding period in 1954, according to the American Potash Institute.

Potash for agricultural use in the United States, Canada, Cuba, Puerto Rico, and Hawaii amounted to 1,454,613 tons K_2O, contained in 2,470,929 tons of salts, of which 2,244,811 tons were muriate of potash, 4,135 tons manure salts, and 221,983 tons sulphate of potash and sulphate of potash-magnesia. This represents an increase of 2 percent in salts and K_2O.

Deliveries to the chemical industry totaled 136,360 tons of muriate of potash and sulphate of potash, containing an equivalent of 84,680 tons K_2O, an increase of 30 percent in salts and K_2O over 1954. Exports outside North America amounted to 102,425 tons of salts, containing an equivalent of 61,956 tons K_2O, an increase of 871 percent in salts and 868 percent in K_2O over the same period in 1954.

The seven major American potash producers delivered 653,662 tons of potash salts, containing an equivalent of 387,819 tons K_2O during the third quarter of 1955, an increase of 5 percent in salts and 6

—*Continued on page 63*

DuPont Film Dep't Places New Laboratory in Operation

The film department of E. I. duPont de Nemours & Co. has placed in operation a new sales development and technical service laboratory at Chestnut Run, near Wilmington, Del.

The laboratory, built at a cost of approximately $1,000,000, represents an expansion of duPont's program of service to customers in applications and use of cellophane, "Mylar" polyester film, acetate film, cellulose sponges and sponge yarn and cellulose bands.

Operations range from physical testing of products to design and development of packages and packaging machinery, investigation of problems of printing and laminating and exploration of electrical and industrial applications of films.

Lederle Equipment to Assist In Chilean Antibiotic Output

Lederle Laboratories, Pearl River, N. Y., a division of American Cyanamid Company, has agreed to make an interest-free loan of $100,000 in machinery and equipment to a Chilean firm, Sociedad Laboratorios Chile, to help establish a plant at Santiago for making antibiotic drugs.

The firm, which will pay Lederle for the equipment over a five-year period, has scheduled construction of a $2,250,000 plant, which will be the first in Chile to manufacture broad spectrum antibiotics, including "Aureomycin," "Achromycin," and certain bismuth, silver, calcium and arsenical drugs and chemicals.

Russell W. Sloan has been promoted to fill the newly-created post of manager of commercial development by Pennsylvania Salt Manufacturing Company, Philadelphia.

Sodium Bichromate Output Rise Expected

United States production of sodium bichromate and chromate is expected to reach approximately 109,000 short tons in 1955, a 9 percent advance over the 1954 level but 15 percent less than the previous record output in 1951, according to a special survey in the October chemical and rubber industry report issued last week by the chemical and rubber division of the Business and Defense Services Administration.

There are now four companies with a total of five plants producing sodium bichromate in the United States. Annual capacity is currently rated at about 133,000 short tons.

Pigments, metal treating and plating (including other corrosion prevention) and leather tanning, in that order of magnitude, accounted for the largest consumption of sodium bichromate and chromate in 1954, these groups combined representing 76 percent of the 1954 usage. Other additional uses are shown in the report.

The study is based on a special survey conducted by the chemical and rubber division, covering the years 1953 and 1954. Comparative data for 1950 and 1951, developed from previously unpublished material, are also included.

Matheson Co. Will Open Gas Division in California

Matheson Company, East Rutherford, N. J., has announced that its board of directors has authorized the opening of a new gas division in California. At the present time, Matheson carries complete stocks of fifty-five different gases in cylinders of various sizes in East Rutherford, and Joliet, Ill. It is planned to set up comparable facilities on the Pacific coast. The exact location of the new plant has not as yet been decided upon, but it is hoped that it will be set up and operating not later than March, Matheson said.

ODM Director Asks Industry To Cut Crude Oil Imports

A cutback in crude oil imports from areas other than Canada and Venezuela in order to bring the inflow of the oil in conformity with the recommendations of the Presidential Advisory Committee on Energy Supplies and Resources Policy was requested last week by Arthur S. Flemming, director of the Office of Defense Mobilization, a letter to the importing companies. Mr. Flemming stated that imports of residual fuel oils, actual and planned, for the period April 1 through December 31, 1955, appears to be in accord with the committee's recommendation, and thus no further cutback in this inflow is contemplated at this time.

Canada and Venezuela were exempted from the cutback request because the Canadian oil is going mainly into the Pacific northwest deficit area and the oil from Venezuela has been reduced substantially. The other foreign oil sources most likely to be affected are Colombia, Mexico, Netherlands West Indies, Sumatra, Iran, Iraq, Kuwait and Saudi Arabia.

Confusion Over Crude Oil Cutback

As regards crude oil, the reduction in imports requested amounted to 7 percent, but some confusion existed as to whether the cutback was desired retroactively to last April 1 or only from now on. In a clarifying statement later in the week, Mr. Flemming explained that it was meant to apply from November 1 through the first quarter of 1956. It would mean a reduction in imports of about 25,000 barrels a day.

It was stated that some of the importers of oil are exceeding the planned ratio of imports to domestic production, as recommended by the President's committee, by as much as 20 percent. The committee had recommended that oil imports be kept in the same ratio to domestic production as occured during 1954.

In his letter to the importing companies, Mr. Flemming stated as follows:—

"Comparing actual and scheduled imports of residual fuel oil for the period subsequent to the first quarter, namely April 1-December 31, 1955, with the amount of imports allowable under the advisory committee recommendation, there will be residual fuel oil imports of 7,000 barrels per day under the committee recommendation, if present programs are carried out. For the third quarter the excess of imports over the committee standard declined sharply and in the fourth quarter scheduled imports will drop below the committee recommendation.

Excess of Imports Seen

"Comparing actual and scheduled imports of crude oil for the period April 1-December 31, 1955, with domestic production (partially estimated), and excluding the special case of imports of Canadian origin, mainly into the Northwest deficit area, there will be an excess of imports of crude oil over the committee standard,

—*Continued on page 55*

Sulfur Firm in Mexico Issues Progress Report

The first United States financed company to produce Frasch process sulfur on the Isthmus of Tehuantepec in Mexico has reported to stockholders that it will reach production of 500 tons daily in November and is actively negotiating for the sale of at least 200,000 tons of sulfur during 1956.

The company, Mexican Gulf Sulphur Company, began production in a jungle clearing at San Cristobal, State of Veracruz, in 1954 and has since produced 114,290 tons of sulfur, according to the stockholders' letter from Paul Nachtman, president.

Currently, two other United States financed companies—Pan American Sulphur Company and Gulf Sulphur Corporation—are in production on the isthmus. In the report to stockholders, Mr. Nachtman said his company had sold 61,245 tons of sulfur as of September 23, and is now in the process of arranging shipping space for an additional 15,000 tons sold in export.

Pigment Discovery Made By Imperial Paper & Color

Imperial Paper & Color Corporation, Glens Falls, N. Y., has announced a chemical pigment discovery by its pigment color division. Known as "Mercadium" red, the discovery is said to provide range of readily available, brilliant and durable colors. The name is a generic one intended to indicate a combination of the sulfides of cadmium and mercury.

Daniel B. Witwer has been appointed manager of the acetylene chemicals department of Antara Chemicals, a sales division of General Aniline & Film Corporation, New York.

MCA Maps Program For Winter Conference

The Manufacturing Chemists' Association has announced the program for its semi-annual meeting and winter conference, to be held November 22 at the Statler hotel, New York.

During the morning session there will be two panels. The first, on "Merchandising and Marketing in the Chemical Industry," will have Hugo Reimer, president of the nitrogen division of Allied Chemical & Dye Corporation, as moderator.

Participating on the panel will be John A. Field, vice-president in charge of sales development for Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation, and Paul B. Slawter, vice-president of G. M. Basford Company.

The second panel will be concerned with "How Your Company Can Inspire Youth Toward Science Careers." The moderator will be William C. Foster, executive vice-president of Olin Mathieson Chemical Corporation.

The following will participate on the second panel:—Harvey Russell, coordinator of educational cooperation for American Cyanamid Company; Arthur Smith, jr., director of public relations for Dow Chemical Company; Arthur V. Wilker, director and trustee for the educational fund of Union Carbide & Carbon Corporation; Philip C. Wolz, president of the New York State School Board Association, Commissioner of Education in Rochester, N. Y., and director of plant

—*Continued on page 46*

American Gilsonite Lets Processing Plant Contracts

The first contracts for starting construction of the new processing plant for American Gilsonite Company near Grand Junction, Col., to produce coke and high-test gasoline from Gilsonite mineral have been awarded to Foster Wheeler Corporation and Kaiser Engineers.

Foster Wheeler Corporation will construct the delayed coking plant and Kaiser Engineers will erect the calcining plant, utilities, and auxiliary facilities, Mr. Goodner said. The contracts involve a total investment of more than $5,000,000. Expansion of the Gilsonite mining operations at Bonanza, Utah, which will feed the new processing plant, is already underway. The Gilsonite mineral in suspension will be transported from Bonanza to Grand Junction by means of a pipeline.

Succinic Acid Available

Succinic acid, formerly available only on a limited basis, is now being marketed for the first time in commercial quantities by the chemical division of Borden Company, New York. Price and technical data are available on written request to Borden's chemical division, 350 Madison avenue, New York 17.

Soviet Seen Making Big Push For Leadership in Science

Soviet Russia is believed to be spending one-fifth of her entire budget on education, with particular stress on mathematics and science, in an all-out drive for technological supremacy, the American Chemical Society's division of rubber was warned at its fall meeting last week in Philadelphia.

As a matter of self-defense, therefore, the US must undertake to train enough scientists and engineers to retain its leadership in technology, which so far has protected it from attack, declared Dr. A. W. Davison, vice-chairman of the Engineering Manpower Council of the Engineers Joint Council.

Charges World Conquest Mania

Dr. Davison, former director of research of Owens-Corning Fiberglas Corporation, Newark, Ohio, described the Soviet Union as a potential enemy "who is obsessed with the mania of world conquest and who sees in America the largest stumbling block to its accomplishment."

"No matter how low an opinion we may hold of the Russian ideologies," he declared, "we dare not underestimate either their intellectual capacities or their willingness to work hard and long.

"They have been aware of their deficiency in technical manpower for many years, and they have set about correcting it a long time ago, with customary meticulousness and energy."

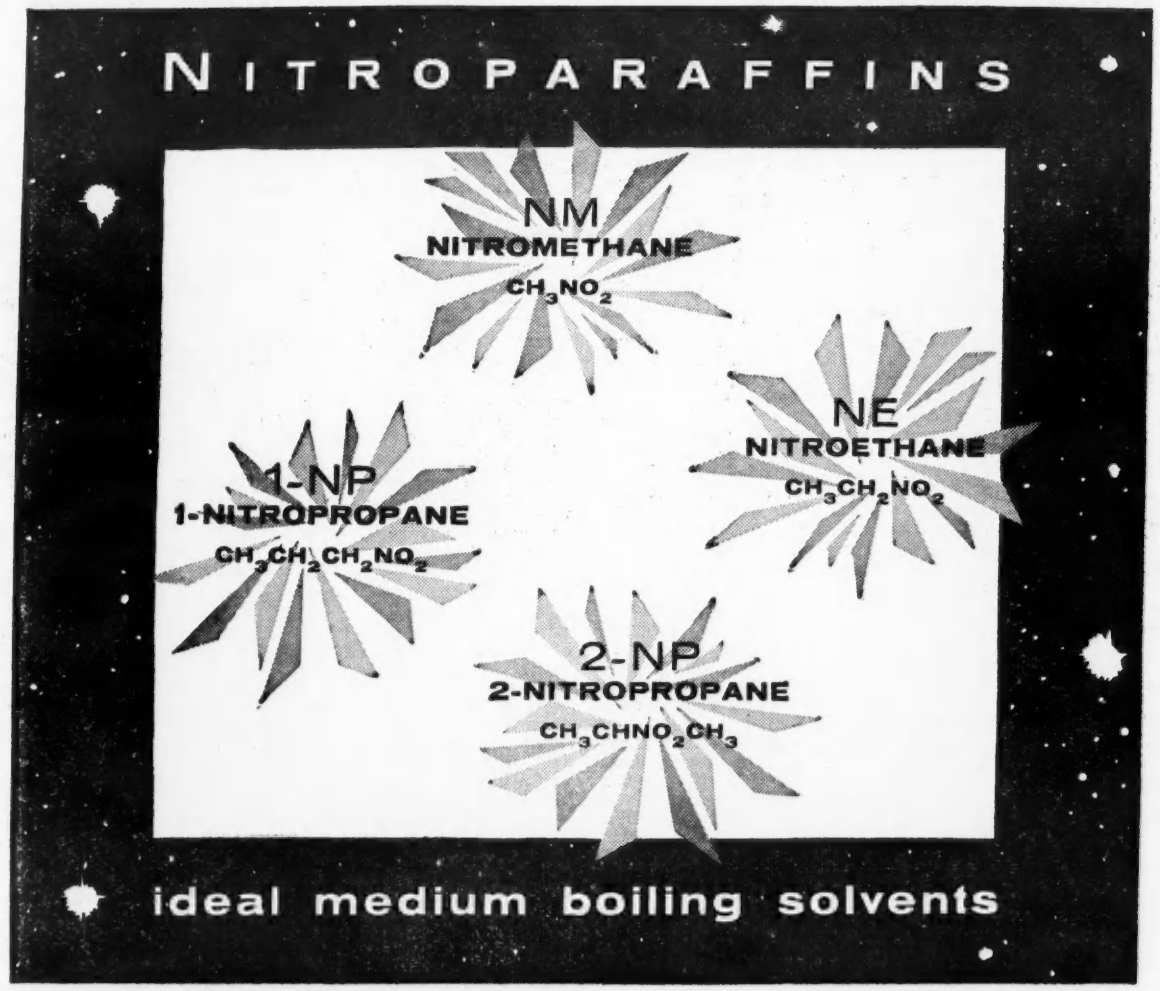
Non-Discoloring Rubber Chemicals

Research leading to new non-discoloring chemicals for vulcanizing rubber and protecting it from deterioration caused by heat, age and the chemical attack of the atmosphere was reported by Dr. D. B. Merrifield, research chemist of Monsanto Chemical Company, Nitro, W. Va.

By using a chemical of the "dithioamine" class as a vulcanizing agent and a "sterically hindered hydroquinone" as a protective agent, he said, it is possible to produce a white or light-colored rubber that will have a long, colorful life and will not discolor enamels or other materials that come in contact with the rubber.

A durable, oil-resistant, low-cost synthetic rubber has been produced by a chemical process starting with rubber

—*Continued on page 59*



As solvents, the NP's present an unusual combination of properties. They are medium-boiling, mild-odored, and have strong solvent power for a wide variety of substances, including many coating materials, waxes, resins, gums, dyes and numerous organic chemicals. They have thoroughly demonstrated their usefulness in the formulation of nitrocellulose, cellulose acetate, cellulose triacetate and cellulose acetate butyrate lacquers and adhesives. They have also found use in specialty products based on various vinyl-type resins.

CSC's new Nitroparaffin plant at Sterlington, La. is now in full production. Additional facilities for increased volume of NP derivatives are nearing completion.

8-PAGE TECHNICAL DATA SHEET AVAILABLE
Get your copy for full details, specifications, properties, uses, solubility tables, chemical reactions, and handling and storage. CSC's Market Development team is ready to work with you in applying these versatile chemicals to your products or processes. Samples of the four basic NP's and their derivatives available on request.

THE NITROPARAFFIN DERIVATIVES
ALKATERGES
AB (2-Amino-1-butanol)
AEPD (2-Amino-2-ethyl-1, 3-propanediol)
AMPD (2-Amino-2-methyl-1, 3-propanediol)
AMP (2-Amino-2-methyl-1-propanol)
NB (2-Nitro-1-butanol)
NEPD (2-Nitro-2-ethyl-1, 3-propanediol)
NMPD (2-Nitro-2-methyl-1, 3-propanediol)
NMP (2-Nitro-2-methyl-1-propanol)
TRIS AMINO (Tris [hydroxymethyl] aminomethane)
TRIS NITRO (Tris [hydroxymethyl] nitromethane)
HAS (Hydroxylammonium Acid Sulfate)
HC (Hydroxylammonium Chloride)
HS (Hydroxylammonium Sulfate)

COMMERCIAL SOLVENTS CORPORATION
260 MADISON AVENUE NEW YORK 16, N. Y.

APMA to Hear Talk By Fishbein Dec. 12

Dr. Morris Fishbein, medical consultant and former editor of the *Journal* of the American Medical Association, will be the opening speaker at the first session of the American Pharmaceutical Manufacturers' Association meeting on December 12 in New York.

Dr. Fishbein will address the export session of the combined mid-year and eastern section meeting on the status of health department registration of pharmaceutical products in Latin America. Dr. Fishbein will report on the conference of the Pan-American Medical Confederation which is currently being held in Bogota, Columbia.

Brown Program Chairman

The APMA meeting will be held at the Waldorf-Astoria hotel December 12 through 14. The chairman of the program committee is Francis C. Brown, president of Schering Corporation and APMA eastern vice-president. The gathering will be preceded by a noon meeting of the organization's twenty-one-man board of directors on December 10. Some twenty-speakers, representing the government, medical profession, pharmaceutical industry and other branches of the business community will address the meeting at five work sessions, an award dinner and a closing luncheon.

The five work sessions will include the export session, on December 12, with Lester W. Manning, of Squibb International, a division of Olin Mathieson Chemical Corporation, presiding; the marketing session

—*Continued on page 50*

CMRA, CCDA Announce Plan For Joint Meeting Nov. 13-15

The plans for the joint meeting of the Chemical Market Research Association and the Commercial Chemical Development Association, to be held November 13 through 15 at the Carter hotel, Cleveland, Ohio, have been announced.

The meeting will begin with an informal get-together on November 13 from 5 p.m. until 10 p.m. in the vice-presidential suite of the Carter hotel. On November 14 plant trips to Industrial Rayon Company, Painesville, Ohio, and Lubrizol Corporation, Wickliffe, Ohio, have been scheduled.

The technical program planned for November 15 will open with a discussion of polyvinyl alcohol fibers by Dr. O. L. Wheeler of Air Reduction Corporation. Sam B. MacFarlane of Celanese Corporation of America will talk on "Cellulose Triacetate Fiber." Dr. Joseph P. Rivers, jr., of E. I. duPont de Nemours & Co., will speak on "Teflon-Polytetrafluorethylene."

To begin the afternoon program on November 15, H. A. Voskamp of the Barrett Division of Allied Chemical & Dye Corporation, will discuss "Nylon -6." "Acrylic Fibers" will be presented by C. W. Bendigo of American Cyanamid Corporation. Paul J. Choquette of General Dyestuff Corporation will talk on "Dyeing Synthetics." Dr. T. F. Cooke of American Cyanamid Corporation will present "Finishing the New Synthetic Fibers."

Buyers Slate Parleys

The Chemical and Allied Products Buyers' Group of the National Association of Purchasing Agents will hold their regional mid-winter meetings in Chicago and New York. The mid-western meeting will be held in Chicago on January 24 at the Palmer House and the eastern meeting in New York on January 31 at the Commodore hotel.

Association Meetings

American Council of Independent Laboratories, annual meeting, Westward Ho hotel, Phoenix, Ariz., November 8-11.

Chemical Bureau Alumni Association of the War Production Board and the National Production Authority, fall get-together, Lexington hotel, New York, November 10.

National Wholesale Druggists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., November 5-9.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Commodore hotel, New York, November 9.

Agricultural Ammonia Institute, fifth annual convention, Kansas City, Mo., December 5-7.

American Institute of Chemical Engineers, annual meeting, Statler hotel, Detroit, Mich., November 27-30.

American Petroleum Institute, annual meeting, St. Francis, Fairmount, Palace and Mark Hopkins hotels, San Francisco, November 14-17.

American Pharmaceutical Association, New York branch, Remington medal presentation dinner, Sheraton Astor hotel, New York, December 5.

American Pharmaceutical Manufacturers Association, mid-year and eastern section meetings, Waldorf-Astoria hotel, New York, December 12-14.

American Public Health Association, Kansas City, Mo., November 14-18.

Chemical Industries Exposition, Commercial Museum and Convention Hall, Philadelphia, December 5-9.

Chemical Market Research Association, joint meeting with CCDA, Carter hotel, Cleveland, Ohio, November 13-15.

Chemical Specialties Manufacturers' Association, annual meeting, Roosevelt hotel, New York, December 5-7.

Commercial Chemical Development Association, joint meeting with CMRA, Carter hotel, Cleveland, Ohio, November 13-15.

Drug, Chemical and Allied Trades section of New York Board of Trade, fall luncheon meeting, Biltmore hotel, New York, November 30.

Industrial Hygiene Foundation, annual meeting, Mellon Institute, Pittsburgh, Pa., November 16-17.

International Atomic Exposition, Cleveland Public Auditorium, Cleveland, Ohio, December 12-16.

Manufacturing Chemists Association, semi-annual meeting, winter conference, Statler hotel, New York, November 22.

National Foreign Trade Council, annual foreign trade convention, Waldorf-Astoria hotel New York, November 14-16.

Northeastern Wood Preservation Council, joint meeting with Northeastern Wood Utilization Council, Connecticut Agricultural Experiment Station, New Haven, Conn., November 17-18.

Nuclear Engineering and Science Congress, Cleveland Public Auditorium, Cleveland, Ohio, December 12-16.

Society of Cosmetic Chemists, fall meeting, Commodore hotel, New York, December 15.

Synthetic Organic Chemical Manufacturers Association, annual dinner, Statler hotel, December 1.

Technical Association of the Pulp and Paper Industry, national plastics meeting, Brooklyn Law School, Brooklyn, N. Y., November 14-15.

Toilet Goods Association, scientific section, mid-winter meeting, Waldorf-Astoria hotel, December 14.

Weed Society of America, first annual meeting, New Yorker hotel, New York, January 4-6.

Petrochemical Growth Is Attributed To Daring and Brilliant Management

Development of the petrochemical industry in this country was sudden—almost explosive—and built upon the cooperation of men of daring and vision with understanding, brave and brilliant management, said Dr. Joseph G. Davidson, vice-president of Union Carbide & Carbon Corporation, New York, last week in accepting the chemical industry medal for 1955, conferred upon him for "conspicuous services to applied chemistry." Production of organic chemicals in the United States that had reached only 14,000,000 pounds annually in 1920 is now about 3,200,000,000 pounds or nearly 230 times as great, Dr. Davidson pointed out. Presentation of the medal took place at a meeting of the American section of the Society of Chemical Industry, sponsor of the medal, following a dinner in the medallist's honor in the Waldorf-Astoria hotel, New York.

Morse G. Dial, Union Carbide president, traced Dr. Davidson's accomplishments against the background of what is now popularly known as the petrochemical industry and pointed out how vital his services have been to that industry. Mr. Dial presented the medallist for the award and the medal was bestowed by Wallace P. Cohoe, past president of the (international) Society of Chemical Industry and New York chemical consultant. Raymond Stevens, vice-president of the chemical consulting firm of Arthur D. Little, Inc., presided as chairman of the American section.

"In looking back over the past thirty-five years, I am amazed at the growth of what has come to be known as the petro-

—*Continued on page 63*

Dr. Joseph G. Davidson

Chemical Progress Week Set By MCA April 23-28, 1956

The third annual Chemical Progress Week has been scheduled for April 23 through 28, 1956, it was announced last week by the Manufacturing Chemists' Association, sponsor of the event. "The purpose of the week," said John E. Hull, MCA president, "is to bring home to the American people the significance of the chemical industry in terms of their daily life. In addition, we hope to establish a still closer working relationship between our industry and the schools with the hope of interesting more young men and young women in scientific and technical careers."

Hardt to Address SOCMA

The Synthetic Organic Chemical Manufacturers Association will meet Wednesday in the Commodore hotel, New York. Robert A. Hardt, vice-president of Hoffman-LaRoche, Inc., will speak on "Constructive Salesmanship—A Modern Philosophy of Selling." Cocktails will be served at 12 o'clock and luncheon at 12:30.

API Lists Noted Personalities as Speakers

Top-flight representatives of business, industry, government and education will be among the speakers at the thirty-fifth annual meeting of the American Petroleum Institute, to be held November 14 through 17 in San Francisco at the St. Francis, Sheraton Palace, Mark Hopkins and Fairmont hotels.

Principal speakers for the two general meetings on November 16 and 17 will be Gov. Goodwin J. Knight, of California; Walter S. Hallanan, president of Plymouth Oil Company and chairman of the National Petroleum Council; H.S.M. Burns, president of Shell Oil Company; S. Clark Beise, president of Bank of America, and Frank M. Porter, president of the American Petroleum Institute.

Among the oil men who will address various sessions of the convention will be James H. Doolittle, vice-president of Shell Oil Company; J. E. Buchanan, president of the Asphalt Institute; R. L. Minckler, president of General Petroleum Corporation; Reese H. Taylor, president of Union Oil Company of California; T. S. Peterson, president of Standard Oil Company of California; Howard G. Vesper, vice-president of Standard Oil Company of California, and W. R. Huber, public relations director for Gulf Oil Corporation and this year's national chairman of the Oil Industry Information Committee.

Representatives of government will include Commissioner Owen Clarke, of the Interstate Commerce Commission, and John M. Pierce, director of finance for the State of California. Among the educators who will speak will be Dr. J. E. Wallace Sterling, president of Stanford University; Dr. Howard P. House and Dr. Aram Glorig, of the University of Southern California; Robert D. Gray, professor

—*Continued on page 63*

Coconut Conference Terms Marketing Pact An Unworkable Idea

An international coconut marketing agreement to stabilize world markets has been rejected as unfeasible by the major coconut producing nations, it was revealed last week by the Department of Agriculture in making public a report on the First International Coconut Conference, which took place in Manila last August.

The decision, USDA said, was based on, among other reasons, the fact that there are numerous fats and oils that are closely competitive with and substitutional for coconut oil.

Four Major Producers Present

The parley was convened to discuss problems common to the major coconut producing nations. Although called on relatively short notice, three of the four principal exporting countries—Ceylon, Indonesia and the Philippines—were represented by substantial delegations. Malaya, the fourth most important exporter, sent an observer.

The conference agenda was centered on (1) developing a coordinated research program among the various countries; (2) standardizing the quality of coconut products, and (3) expanding and stabilizing world markets for coconut products.

The following resolutions were adopted unanimously by the conference:—

(1) That member governments be requested to adopt and enforce a system of grades and standards for copra and other coconut products and to publish them for the information of producing and consum-

—*Continued on page 50*

Food, Drug Law Founding To Be Commemorated in '56

Industry groups, trade associations, individual firms and consumer organizations will join forces with federal and state officials in a year-long program of activities during 1956 to mark the fiftieth anniversary of national legis ation in the food, drug and cosmetic fields. This was announced by Eugene H. Holeman, president of the Association of Food and Drug Officials of the United States, as he named the members of a fiftieth anniversary general committee.

The committee is made up as follows:—Coordinator for control officials, Joe F. Lakey, director, division of food and drugs, Texas Department of Health; chairman of control officials, Henry J. Hoffman, chief chemist, Minnesota Department of Agriculture, Dairy and Food; vice-chairman for control officials, Commissioner George P. Larrick, Food and Drug Administraton.

A. H. Fiske, vice-president, Eli Lilly & Company, was named chairman for drug and cosmetic industries; S. L. Mayham, executive vice-president of the Toilet Goods Association, was named vice-chairman of the drug and cosmetic industries.

CSMA Will Honor Harris Of Monsanto on December 6

J. C. Harris, director of the application research department of Monsanto Chemical Company's merchandising division in Dayton, Ohio, has been selected by the Chemical Specialties Manufacturers' Association as the recipient of its 1955 achievement award.

The award will be presented to Mr. Harris at the association's annual meeting in New York on December 6 in recognition of his outstanding contributions to the evaluation of detergents and establishment of industry standards for surface active agents. His work along those lines, the association noted, has spanned the last twenty years. Mr. Harris has been active in the detergents research field since joining Monsanto Chemical Company, St. Louis, Mo., as a research chemist in 1936.

Hull Scheduled to Speak At Dinner for Dow Corning

John E. Hull, president of the Manufacturing Chemists Association, will be the principal speaker at a banquet to be given in honor of Dow Corning Corporation, Midland, Mich., on December 7. Dow Corning, winner of this year's chemical engineering achievement award, will receive the honor at the Bellevue-Stratford hotel in Philadelphia, during the Twenty-fifth Exposition of the Chemical Industries. *Chemical Engineering* magazine wi l give the banquet in honor of Dow Corning for its pioneering leadership in the commercial development of the silicone industry.

MEMO FROM: Product Development Committee

TO: Purchasing Department

We approve vitamin A 'Roche' for all uses.
The quality is very high. All types of the
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Per .....

Both liquid and dry forms of
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with your manufacturing problems
in mind. Vitamin A 'Roche' has
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. Stability . Availability
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Sodium sesquisilicate, hydrated, bgs.,
c.l., works ..... 100 lbs. 4.60 • —
l.c.l., works ..... 100 lbs. 4.95 • 5.35
dms., c.l., works ..... 100 lbs 5.00 • —
l.c.l., works ..... 100 lbs. 5.35 • 5.75

Sales zones are: (1) All States E. of Miss. R. and N. of south bounc. of Ky. and

Stannous chloride, anhyd., cms., works lb. .805 -1.074
Hydrous (crystals), cms., works, works lb. .76 • .77
Sulfate, dms., works ..... lb. .924 • .944
Starch, corn, pearl

c.l., works ..ton.18.40 • —
l.c.l., works ..... ton.36.00 • —
fibrous, New York, grd., bgs..

Sulfocyanides, Tetraborates, Tetrasulfides, Thiocyanates, tech., Thiosulfates, tech., Titanate, Toluene, Trichloracetates, Tungstates, Sodium-ammonium, Sodium-carboxymethyl, Sodium cinchophen, Sodium-formaldehyde, Sodium-zirconyl, Solvent naphtha, petroleum, aromatic, Sorbitan monostearate, Sorbitol, cryst., powd., dms., Stoin., comi., aqu, reg., 70%, aqu, Soybean meal, 44%, protein, chemically, mechanically re...

Sparteine sulfate, ens ..... oz. .80 • .85
Spearmint leaves, dom. bls ..... m. 75 • —
imp., bls ..... lb. 1.25 • —
Spruce, extract, liq., reg., tanks, works lb. .01¼• —
powd., super., bgs., c.l., works, lb. .05¼• —
l.c.l., works ..... lb. .05½• —
Squill, white, bls ..... lb. .17 • .19
powd., 1 bls, bxs ..... lb. .18 • .21
St. John's bread, edible, bls lb. .13 • .15
Stannic chloride, anhyd., dms., works lb. .752 • .762
Oxide, dms., dkd. E ..... lb. .93½• .94½

ground, bgs., ex-dock ..... ton.132.00 • —
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk, c.l., Baltimore, unit-ton. .88 • .91
Carteret, N. J. unit-ton. .89 • .91
triple, 48% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla, unit-ton. .98 • —

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 • —
l.c.l., same basis ..... lb. 1.30 • 2.30
Isopropyl, ester, dms., c.l., works, frt. equald. lb. 1.30 • —
l.c.l., works ..... lb. 1.35 • —

solid, dms., works ..... lb. .70 • .80
solid, dms., frt. alld. ..... lb. .61 • —
m-Toluidine, dms., c.l., works, frt. alld. lb. .79 • —
l.c.l., same basis ..... lb. .80 • —
tanks, same basis ..... lb. .78 • —
o-Toluidine, dms., c.l., works, frt. alld. lb. .23 • —
l.c.l., same basis ..... lb. .24 • —
tanks, same basis ..... lb. .22 • —
p-Toluidine, flake, dms., frt. alld. lb. .64 • —
solid, dms., frt. alld. ..... lb. .60 • .61
Toluol, coaltar, indust. or nitration, tanks, works:—
Bethlehem, Pa. ..... gal. .24 • —
Birmingham dist. ..... gal. .32 • —
Chicago dist ..... gal. .25 • —
Cleveland dist. ..... gal. .32 • —
Geneva, Utah ..... gal. .28 • —
Johnstown, Pa. ..... gal. .32 • —
Lackawanna, N. Y. ..... gal. .33 • —

V

Vitamin A acetate, syn., crystalline, beads, 500,000 A units per gram, dry, 500,000 units per gram, kilo lots, 325,000 units per gram, same basis, kilo, 250,000 units per gram, same basis, kilo.
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram, 1,000,000 units, .12 • —
Palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units, .12 • —
in oil, 3,000,000 A units per gram, 1,000,000 units, .12 • —

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, November 4 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms. works lb. .40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½- —
tanks, dlvd lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., bbls., c.l., dlvd. lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½- —
USP, bbls., 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 - .86
Acetic anhydride, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd. lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib., dms., c.l., dlvd. lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib., dms., c.l., dlvd. lb. .62 - —
l.c.l., dlvd lb. .63 - —
Acetone, CP, dms., c.l., dlvd. lb. .09 - —
l.c.l., dlvd. lb. .10 - —
tanks, dlvd. lb. .07 - —
Diethyl (see MD
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19
Acetophenone cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt. alld E. of Denver, lb. .40 - —
tanks, frt. alld. E. of Denver, lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms., c.l. works lb. .06½- —
l.c.l., works lb. .07 - .07½
Acetic, coml., or redist., 28%, bbls. 100 lbs. 4.80 - —
56%, bbls 100 lbs 8.25 - —
70%, bbls 100 lbs. 9.95 - —
80%, bbls 100 lbs.10.45 - —
glacial, syn., CP, dms., dlvd. 100 lbs.15.00 -16.00
tech., dms., c.l., dlvd 100 lbs.12.00 - —
l.c.l., dlvd 100 lbs.13.00 - —
tanks, dlvd 100 lbs.10.00 - —
USP chys., inclusive, dlvd., 100 lbs.24.00 -25.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (60 mesh) bbls., 1,000-lb. lots, lb. .58 - .60
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Adipic, bgs., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37½- —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.30 - —
smaller lots, works lb. 2.35 - 2.60
p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 - —
smaller lots, same basis lb. 4.05 - 4.50
Anthranilic, bbls., frt. equald lb. 1.21 - —
Arsenous, tech., (see Arsenic, white.
USP (see Arsenic trioxide).
Ascorbic USP, dms., 25-100 kilo lots kilo.16.00 - —
10-kilo lots kilo.16.35 - —
5-kilo lots kilo.16.75 - —
bots., 1-kilo lots kilo.17.00 - —
500-gram lots kilo.17.50 - —
Battery, chys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi ton.176.50 - —
smaller lots, same basis. ton.181.50 - —
dms., c.l., works ton.151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton.201.00 -222.00
smaller lots, same basis. ton.206.00 -227.00
gran., bgs., c.l., works ton.101.75 - —
ton lots, ex whse, N. Y. or Chi ton.151.50 - —
smaller lots, same basis. ton.156.50 - —
dms., c.l., works ton.126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton.176.00 -197.00
smaller lots, same basis. ton.181.00 -202.00
bulk, c.l., works ton.95.75 - —
ton.161.50 - —
powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse, N. Y. or Chi ton.156.50 - —
smaller lots, same basis.
Boric, tech., 99.9%, powd., dms., c.l., works ton.131.25 -152.25
ton lots, ex whse., N. Y. or Chi ton.181.00 -202.00
smaller lots, same basis. ton.186.00 -207.00
Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., works, lb. .34 - —
t.c.l., works lb. .34½- —
tanks, works lb. .32½- —
Capric, dms lb. .24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Castor oil, split, dms lb. .35½- .36
Chicago, bbls., frt alld lb. 3.21 - —
Chloroacetic, mono-, purif., flake, 99%, dms lb. .23½- .25½
tech., flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib. dms., works. lb. 1.13 - —
p-Chlorobenzoic, fib. dms., works. lb. 1.59 - 1.62
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.
Acid, cholic, 100-lb. lots, fib. dms. lb. 6.00 - 6.35
Chromic, 99¾%, dms., c.l., works, frt. equald lb. .28¼- —
l.c.l., dlvd., N. Y. metropolitan area lb. .29 - .30
NF (see Chromium trioxide).
Cinnamic, refd., bots lb. 2.50 - 3.50
Citric, USP, anhyd., gran., fine gran., dms., c.l. lb. .28¾- —
10,000-lb. lots, 1 shipt. lb. .29¼- —
smaller lots lb. .29¾- .31¼
hydrous, gran., fine gran., dms., c.l. lb. 27 - —
10,000-lb. lots, 1 shipt. lb. .27½- —
smaller lots lb. .28 - .29¼
Powdered citric acid ½c. higher.
Cleve's, mixed, bbls lb. .79 - —
Coconut oil, dist., dms lb. .24¾- .26¾
tanks lb. .22¾- —
dbl. dist., dms lb. .25¾- .27¾
tanks lb. .23¾- —
Corn oil, dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —
Cottonseed oil, dist., dms lb. .1525- .1725
tanks lb. .1325- —
2,3-Cresotic, dms., ton lots, works. lb. .70 - —
less than ton lots, works lb. .72 - —
Cresylic, coaltar, dom., 50% 207° C or above, resin and tricresyl phosphate grade, tanks, frt. equald gal. 1.00 - —
50% 210° C. or above, total range over 9° C., non-resin grade, dms., c.l., same basis gal. .91 - —
l.c.l., same basis gal. .94 - —
tanks, same basis gal. .80 - —
50% 204° to 207° C., tricresyl phosphate and resin grade, tanks, same basis gal. 1.10 - —
Imp., 75% at 215°C., or over, dms., ex whse gal. .85 - 1.00
petroleum, dom., 195° to 214°C., non-ret. 65 dms. to c.l., works, San Francisco and Los Angeles gal. .75 - —
l.c.l., same basis gal. .77 - .79
tanks, works, frt. alld. E. gal. .71 - —
200° C. to 222° C., tanks, Wilmington, Cal gal. .62 - .69
211° C to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .67 - —
l.c.l., same basis gal. .69 - .71
tanks, same basis gal. .54 - —
220° C. to 242° C., tanks, Wilmington, Cal gal. .54 - .59
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib. dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech., bbls lb. .90 - 1.25
Dehydrocholic, injection, fib. dms., 100-lb. lots lb.12.25 - —
oral, fib dms., 100-lb. lots lb. 9.25 - —
D, desoxycholic, fib. dms., 100-lb. lots lb.14.00 - —
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital)
Diglyconic, bgs., works lb. .14 - —
2-ethyl hexoic, dms., c.l., works lb. .36½- —
l.c.l., works lb. .37½- —
tanks, works lb. .34½- —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns kilo-lots or more gram. 1.40 - —
Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
t.c.l., works lb. .1673- .1775
Fumaric, tech., bgs., dms lb. .27 .28
Gallic, NF VII, bbls., 1,000-lb. lots. lb 1.80 —
smaller lots lb. 1.82 - 2.00
tech., bbls., 1,000-lb. lots lb. 1.58 - —
smaller lots lb. 1.82 - 2.00
Gamma, dry, grd., bbls., frt. alld. lb. 1.50 - —
paste, bbls., frt. alld lb. 1.45 - —
Gentisic, 100-lb fib. dms lb. 6.50 - —
Gluconic, tech., 50% bots lb. .25 - .35
cbys. lb. .19 - —
dms. lb. .15½- —
l-Glutamic, 99½% fib. dms., 100 lb. lots, works lb 2.45 2.53
25 lb. lots, works lb. 2.54 2.60
Glycerophosphoric, 35%, dms., works lb. 2.25 2.35
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., works, 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., cbys lb. 2.94 - —
1.70 s.g., cbys lb. 3.23 - —
Hydrobromic, medicinal, 48%, cbys., dlvd E lb. .37 - .43
Hydrochloric, anhyd. (see Hydrogen chloride).
18° cbys., c.l., works 100 lbs. 2.50 - —
t.c.l., dlvd. Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton.26.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
t.c.l., dlvd Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
t.c.l., dlvd Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton.35.00 - —
CP, USP, consumers, cbys., extra c.l., works lb. .11¾- —
t.c.l., same basis lb. .13¼- .13¾
5-pint bots., extra, cs., c.l., same basis lb. .16¾- —
l.c.l., same basis lb. .18¼- .19¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c. per lb. less.
Hydrocyanic, cyls., frt. alld lb. .75 .95
dilute, NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, tanks, works lb. .21 - —
70%, steel, dms., works lb. .18½- .22½
Hydrofluosilicic, dms., works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .138 - —
tanks, Belle, W. Va., 100% basis lb. .095 —
Hypophosphorus, purif., 50%, cbys lb. 1.30 - 1.32
USP, cbys. lb. .88 - —
Isonicotinic, 100 lb fib dms, works lb. 5.00 - —
Itaconic, fib dms., c.l., works lb. .59 - —
l.c.l., works lb. .60 - —
Hydrazide (see Isoniazid).
J, bbls., works, 100% basis lb. 2.50 2.85
Koch, bbls., frt. alld lb. 1.00 - —
L, bbls., works lb. 1.25 —
Lactic, edible, 50%, bbls., 20 or more lb. .1754- .215
smaller lots lb. .1854- .225
80%, bbls., 5 or more lb. .3054- .37
smaller lots lb. .3104- .375
plastic grade, 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
t.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs.12.20 - —

Acacia—Acid, Lactic, 80%

Acid, boric, tech., 99.9%, powd., dms., c.l., works ton.131.25 -152.25
ton lots, ex whse., N. Y. or Chi ton.181.00 -202.00
smaller lots, same basis. ton.186.00 -207.00
Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric Acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., works, lb. .34 - —
t.c.l., works lb. .34½- —
tanks, works lb. .32½- —
Capric, dms lb. .24 - .26
Caprylic, dms. lb. .24 - .26
Cassella, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Castor oil, split, dms lb. .35½- .36
Chicago, bbls., frt alld lb. 3.21 - —
Chloroacetic, mono-, purif., flake, 99%, dms lb. .23½- .25½
tech., flake, 96-97%, dms., frt. equald lb. .20 - .21
o-Chlorobenzoic, fib. dms., works. lb. 1.13 - —
p-Chlorobenzoic, fib. dms., works. lb. 1.59 - 1.62
Chlorosulfonic, dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
anhyd.	anhydrous	dms.	drums	nom.	nominal
a.p.a.	available phosphoric acid	dom.	domestic	o-	ortho
approx.	approximately	E.	east	ord.	ordinary
artif.	artificial	e.p.	end point	oz.	ounce
ASTM	American Society for Testing Materials	equald.	equalized	p-	para
		exp.	expressed	Pac.	Pacific
Atl.	Atlantic	F.	fahrenheit	pf.	proof
Be.	Baume	ferment.	fermentation	phos.	phosphate
bbls.	barrels	f.f.a.	free fatty acid	photo.	photographic
bgs.	bags	f.f.c.	free from chlorine	pkgs.	packages
bis.	bales	fib.	fiber	powd.	powdered
bots.	bottles	f.o.b.	free on board	precip.	precipitated
b.p.	boiling point	f.p.a.	free of prussic acid	prod.	producer
b.p.l.	bone phosphate of lime	frt.	freight	pt.	point
b.r.	boiling range	gal.	gallon	pulv.	pulverized
bxs.	boxes	gran.	granular	purif.	purified
C.	centigrade	grd.	ground	redist.	redistilled
cbys.	carboys	I.&a.	iron and aluminum	refd.	refined
CD	completely denatured	I.b.p.	initial boiling point	refy.	refinery
c.i.f.	cost, insurance, freight	imp.	imported	reg.	regular
cks.	casks	incl.	included	resub.	resublimed
c.l.	carlots	indust.	industrial	ret.	returnable
cns.	cans	kgs.	kegs	SD	specially denatured
coml.	commercial	l-	laevo	s.d.	single distilled
conc.	concentrated	lacq.	lacquer	S. E.	southeast
CP	chemically pure	lb.	pound	sec.	secondary
		l.c.l.	less than carlots	scns.	seconds
cps.	centipoises	l.t.l.	less truckload	s.g.	specific gravity
cryst.	crystal	liq.	liquid	ship't	shipment
cs.	cases	mfrs.	manufacturers	soln.	solution
ctns.	cartons	m-	meta	s.u.	standard unit
cyls.	cylinders	m.a.p.	mixed aniline point	syn.	synthetic
		min.	minimum	tanks.	railroad tankcars
d-	dextro	m.p.	melting point	tech.	technical
dbl.	double	N-	nitrogen	tert-	tertiary
denat.	denatured	n-	normal	t.l.	truck loads
dest-dist.	destructive-distilled	nat.	natural	t.w.	tank wagons
		neut.	neutral	USP	U. S. Pharmacopoeia
dl-	dextro-laevo	NF	National Formulary	vis.	viscosity
dist.	distilled			VM&P	varnish makers & painters
				w. w.	west
				W.	warehouse
				whse.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

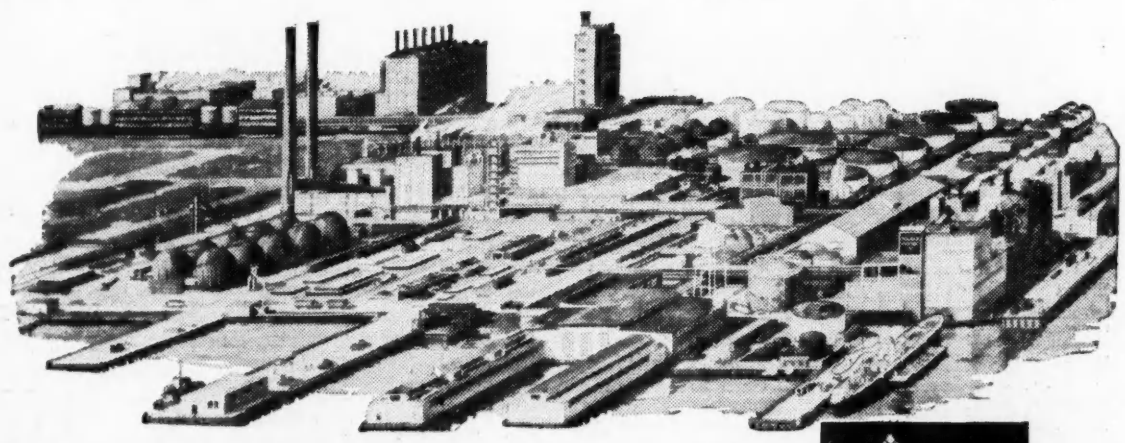
Acid, Lactic, 44%—Alcohol, Denat., SD3A

Acid, lactic, 44%, bbls., c.l., works, 100 lbs. 11.45 - 11.95
l.c.l., works 100 lbs. 11.85 - 12.35
USP, 85%, cbys. lb. .85 - .88
Laurent's, bbls lb. .60 - —
Laurie, dms lb. .35½ - .37½
Linseed oil, dist., dms lb. .1865 - —
w.w., dms lb. .2165 - —
Maleic, cryst., powd., dms lb. .37 - .38
Malic, tech., dms lb. .50 - —
Mandelic, NF, dms., 1,000-lb. lots, lb. 2.35 - —
smaller lots lb. 2.40 - 2.50
Metanilic, dms., works lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .54½ - —
smaller lots, works lb. .55 - —
Molybdic, 85-92%, dms., works lb. 1.35 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .28 - 29¾
1-Naphthol-4-sulfonic (see Acid, Neville and Winthers).
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic, 8-amino (see Acid, S)
1-Naphthol-3,6-disulfonic, 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic, 2-amino (see Acid, J).
Naphtholsulfonic, mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid, Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.20 - —

Acid, nicotinic, USP, dms., frt, adjusted kilo. 8.00 - 8.30
Amide, USP (see Nicotinamide)
Nitric, 36° Be cbys., c.l., works, E, 100 lbs. 5.75 - —
l.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be cbys., c.l., works, E, 100 lbs. 6.25 - —
l.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E, 100 lbs. 6.75 - —
l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be cbys., c.l., works, E, 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumers, cbys., extra c.l., works lb. .13½ - —
l.c.l., same basis lb. .11¼ - .11¾
5-pt. bots., extra, cs., c.l., same basis lb. .17½ - —
l.c.l., same basis lb. .14¾ - .20¾
p-Nitrobenzoic, dms., c.l., works lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .18 - .20
tanks lb. .16 - —
dbl. dist. (white), dms lb. .20½ - .22½
tanks lb. .1350 - —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Cresotic).
Oxalic, bbls., c.l., works lb. .16½ - —
10,000-lb. lots, works lb. .16¾ - —
smaller lots, works lb. .17¾ - —
b-Oxynaphthoic, bbls., works lb. 1.14 - —
Palm oil, dbl., dist., dms lb. .14¼ - .16¼

Acid, para-aminobenzoic (see Acid, p-Aminobenzoic).
Para-aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst. cns. lb. .75 - 1.70
Phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic).
Phosphoric, food grade, 75%, cbys., c.l., frt. alld, E, 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 7.00 - 8.00
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld, 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 7.85 - 9.10
NF, 85%, cbys., c.l., works lb. .0825 - —
l.c.l., works lb. .0850 - .0975
tanks, works lb. .0640 - —
Picric, NF, bbls. lb. .60 - —
tech., bbls. lb. .34 - .35
Propionic, syn., pure, dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .19 - —
Pyrogallic, NF, (see Pyrogallol).
tech., bbls lb. 2.76 - 2.99
Ricinoleic (see Acid, castor oil, split).
S, bbls., works lb. 3.25 - —
Salicylic, crude, fib. dms., c.l. lb. .35 - —
l.c.l., same basis lb. .36 - —
sublimed, tech., fib. dms., c.l. lb. .37 - —
l.c.l. lb. .41 - —
USP, cryst., fib. dms lb. .48 - —
powd., fib. dms lb. .55 - —
Sebacic, purif., dms., c.l., works lb. .59 - —
l.c.l., works lb. .61 - .65
Soybean oil, dbl. dist., dms lb. .17¾ - .19¾
tanks lb. .15¾ - —
s.d., dms lb. .16¼ - .18¼
tanks lb. .14¼ - —

Acid, stearic, dbl. pressed, bgs. lb. .14¾ - .16¾
single pressed, bgs lb. .14¼ - .16¼
triple pressed, bgs lb. .17 - .19
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech., dms., c.l., frt. alld lb. .19 - —
l.c.l., frt. alld lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
l.c.l., works 100 lbs. 2.45 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works, 100 lbs. 2.25 - —
l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
98%, tanks, works ton. 23.50 - —
99-100%, tanks, works ton. 23.95 - —
CP, NF, consumers, cbys. extra, c.l., works, frt. equald lb. .09¾ - —
l.c.l., same basis lb. .11¼ - .11¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .13¼ - —
l.c.l., same basis lb. .14¼ - .20¾
fuming (oleum), 20%, tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks, works ton. 39.50 - —
Tallow, dist., dms lb. .14¾ - .16¾
hydrogenated, bgs lb. .13¾ - .15¾
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
smaller lots lb. 1.96 - 2.01
tech., dms. lb. .95 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l. lb. .44 - —
10,000-lb. lots, 1 shipt lb. .44½ - —
smaller lots lb. .45 - —
100-lb. dms lb. .46 - —
small, dms. lb. .48 - .54
imp., bgs lb. .38 Nom.
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Tobias, bbls., frt. alld lb. .77 - —
Toluenesulfonic, dms., c.l., works, lb. .16 - —
l.c.l., works lb. .17½ - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l. lb. .90 - —
125 lbs. to t.l. lb. 1.00 - —
p-Toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., kgs., works lb. 4.25 - —
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½ - —
Acrylonitrile, dms., c.l., t.l., works, lb. .30 - —
l.c.l., l.t.l., works lb. .31 - —
tanks, works lb. .27 - —
ACTH, cryst., bulk, 1,000 units gram, bots gram 15.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 3.00 - 3.25
powdered, 30 mesh, fib., dms lb. 3.40 - 3.50
dl-Alanine, dms., works lb. 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms., l.c.l lb. .65 - .90
Egg, edible, flake, bbls lb. 1.80 - 1.85
powd., cryst., bbls lb. 1.84 - 1.89
tech., cryst., bbls lb. .70 - .85
Alcohol, allyl, dms., c.l., dlvd lb. .32 - —
l.c.l., dlvd lb. .33 - —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132° C., dms., l.c.l., dlvd lb. .43 - —
ACS grade, dms., c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .17 - —
l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .15 - —
primary, dms., c.l., frt. alld, lb. .19¼ - —
l.c.l., frt. alld lb. .20¼ - —
tanks, frt. alld lb. .17¼ - —
sec-synthetic, dms., c.l., works, frt. alld lb. .13 - —
l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
tert-synthetic, dms., c.l., frt. alld, E lb. .17 - —
l.c.l., frt. alld, E lb. .18 - —
tanks, frt. alld, E lb. .15 - —
1-pentanol, (syn. normal), dms., c.l., works lb. .42 - —
l.c.l., works lb. .43½ - —
tanks, works lb. .40 - —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½ - .49
n-Butyl, ferment., dms., c.l., frt. alld lb. .15 - —
l.c.l., frt. alld lb. .16 - —
tanks, frt. alld lb. .13 - —
n-synthetic, dms., c.l., dlvd lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .13 - —
sec-synthetic, dms., c.l., dlvd, lb. .13 - —
l.c.l., dlvd lb. .14 - —
tanks, dlvd lb. .11 - —
tert-synthetic, dms., c.l., frt. alld, lb. .14 - —
l.c.l., frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Capryl, 95%, dms., c.l., works lb. .21½ - —
l.c.l., works lb. .22½ - .23½
tanks, works lb. .19½ - —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .73 - —
smaller lots lb. .80 - 1.15
NF, fib. cns., 140-lb. lots or more lb. .58 - .82
smaller lots lb. .59 - .82
Cinnamic, bots lb. 2.15 - 2.75
Decyl, mixed isomers, dms., c.l., dlvd. lb. .23 - —
l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .21 - —
normal (see 1-Decanol).
Denat., CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .54½ - —
l.c.l., same basis, gal. .59½ - .65¼
tanks, dlvd. same basis, gal. .41½ - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.
SD1, dms., c.l., dlvd. E. of Rockies gal. .55½ - —
l.c.l., same basis gal. .60½ - .66¼
tanks, same basis gal. .42½ - —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —



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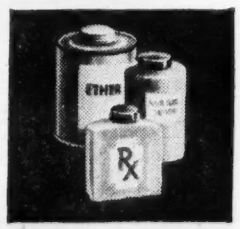

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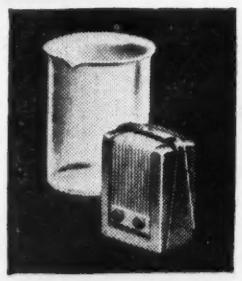

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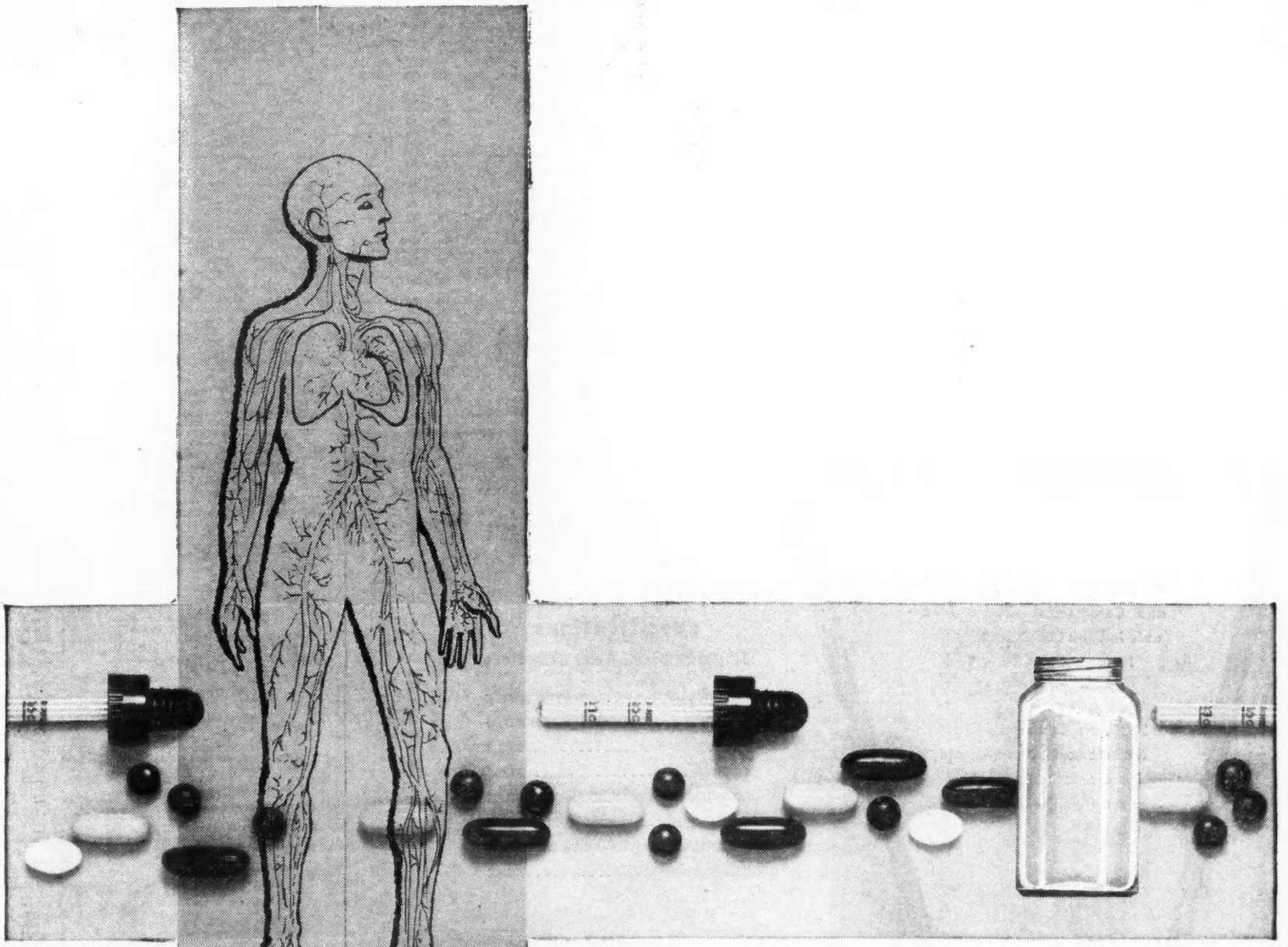

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Alcohol, Denat., SD23A—Ammonium Carbonate

Alcohol, denat., SD23A, dms., c.l., dlvd. E. of Rockies gal. .55½- —
l.c.l., same basis gal. .60½- .66½
tanks, same basis gal. .42½- —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .56 — —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .54½- —
l.c.l., same basis gal. .59½- .65½
tanks, same basis gal. .41½- —
SD30, dms., c.l., dlvd. E. of Rockies gal. .53 - —
l.c.l., same basis gal. .58 - .64
tanks, same basis gal. .40 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .56 - —
l.c.l., same basis gal. .61 - .67
tanks, same basis gal. .43 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .54 - —
l.c.l., same basis gal. .59 - .65
tanks, same basis gal. .41 - —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Diacetone, acetone-free, dms., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
tech., dms., c.l., dlvd lb. .13½- —
l.c.l., dlvd lb. .14½- —
tanks, dlvd lb. .11½- —
Alcohol, ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal.20.48 — —
l.c.l. same basis gal.20.53 -20.59
tanks, same basis gal.20.35 — —
Alcohol, ethyl, 190 pf., USP tax free dms. c.l. dlvd E. of Rockies gal. .53 — —
l.c.l. same basis gal. .58 .64
tanks same basis gal. .40 — —
absolute, 200 pf., tax paid, dms., c.l., dlvd. E of Rockies. gal.21.58 — —
l.c.l. same basis gal.21.63 -21.69
tanks same basis gal.21.45 — —
2-Ethylbutyl, dms., c.l., works lb. .20½- —
l.c.l., works lb. .30 - —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E lb. .23¾- —
l.c.l., same basis lb. .24¾- —
tanks same basis lb. .21¾- —
Furfuryl, cns., works lb. .29 - —
dms., c.l., Cedar Rapids, Ia lb. .21 — —
Newark, N. J lb. .21½- —
l.c.l. Cedar Rapids, Ia lb. .22 — —
Newark, N. J lb. .22½- —
tanks Memphis, Tenn lb. .184 - —
Hydroabietyl, tech., soild, Zone 1, dms., c.l., dlvd lb. .27 - —
l.c.l., dlvd lb. .27½- —
tanks, dlvd lb. .25 - —
Isoamyl, dms. c.l. works, frt. alld, E lb. .34 - —
l.c.l., same basis lb. .35 - —
tanks, same basis lb. .32 - —
Isobutyl, dms., c.l., dlvd lb. .14 - —
l.c.l. dlvd lb. .15 - —
tanks, dlvd lb. .12 - —
Iso-octyl, dms., c.l., dlvd. E lb. .23 - —
l.c.l. dlvd. E lb. .24 - —
tanks. dlvd E lb. .21 - —
Isopropyl, refd., 91%, dms., c.l., dlvd. gal. .48 - —
l.c.l., dlvd gal. .53 - —
tanks, dlvd. gal. .35 - —
Alcohol, isopropyl, refd., 95%, c.l., dlvd. gal. .50 - —
l.c.l., dlvd gal. .57 - —
tanks, dlvd gal. .37 - —
99%, dms., c.l., dlvd gal. .52 - —
l.c.l., dlvd gal. .59 - —
tanks, dlvd gal. .39 - —
Lauryl, bots. lb 2.00 - 2.50
Methyl (see Methanol).
Metnylamyl (see Carbinol, methyl-isobutyl)
Octyl perfumer's grade, bots lb. 1.75 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms lb. 1.14 - 1.45
standard, dms. lb. 1.18 - 1.48
n-Propyl, dms., c.l., dlvd lb. .12 - —
l.c.l. dlvd lb. .13 - —
tanks, dlvd lb. .10 - —
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms. c.l., Niagara Falls, N. Y. lb. .44½- —
l.c.l., Newark, N. J., Cedar Rapids, Ia lb. .47 - —
tanks, Niagara Falls, N. Y lb. .43 - —
Indust. grade, dms., c.l., Niagara Falls, N. Y lb. .305 - —
l.c.l., Newark, N. J., Cedar Rapids, Ia lb. .33 - —
tanks, Niagara Falls, N. Y. lb. .29 - —
Tridecyl, mixed isomers, dms., dlvd lb. .26 - —
l.c.l., dlvd lb. .27 - —
tanks, dlvd lb. .24 - —
Wood (see Methanol)
Aldol, 95%, dms. works lb. .23 - —
denaturing grade dms gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .85 - —
Aletris root, bgs lb. 1.75 - 1.85
Algin (see Sodium alginate).

Allethrin, 90%, dms. frt alld lb.28.80 -28.90
soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½%, dms., frt. alld lb. 95 1.00
Allspice (see Pimento)
Allyl bromide, cbys., works lb. 1.35 - 1.40
Chloride, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .15 - —
Starch, solid, dms., works lb. .52¾- .54¾
solution, 40%, toluol-butanol, dms., works lb. .25½- .26¼
Aloe, Cape, cs. lb. .45 - .48
powd., cs. lb. .50 - —
Curacao, kgs. lb. .50 - .55
Aloin, USP, bbls., dms., kgs lb 3.75 3.82
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline)
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd. dms. works 100 lbs 5.20 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms. works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Potash-chrome, dms lb. .17 - —
Sodium, dms., c.l., works 100 lbs. 4.60 - —
l.c.l. works 100 lbs. 5.00 - —
Alumina, calcined, bgs., c.l., works. lb. .0425- —
l.c.l., works lb. .045 - .055
Aluminum acetate, basic soln., 24%, bbls., l.c.l. works lb. .14 - —
Chloride coml., anhyd., dms., c.l., works, frt. equald lb. .15½- —
l.c.l. works, frt equald, lb. .16 - —
crvst., dms., c.l., works lb. .1450- —
l.c.l., works lb. .1500- —
soln. 32°, cbys., c.l., works lb. .0445- —
l.c.l., works lb. .0520- .1295
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Fluoride tech. anhyd., bgs., c.l., works lb. .15¾- —
l.c.l., works lb. .16¾- .18¾
Aluminum fluoride in fib. dms. 0.35c per lb higher.
Formate, basic soln., c.l., dms., works lb. .12 - —
l.c.l., works lb. .12½- —
Hydrate, heavy bgs., c.l., frt. equald lb. .0295- —
2,000-20,000 lb. lots, same basis lb. .042 - —
bulk, same basis lb. .027 - —
light, bgs., dlvd lb. .18 - —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib. dms., works lb. .82½- —
contract, works lb. 79½- —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2440- —
pigs, 10,000-lb. lots, frt. alld, lb. .2250- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .65½- —
standard grade, dms. lb. .45½- —
powder, lining, extra, fine, dms. lb. 1.05½- —
standard grade, dms lb. .75 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 25-lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., frt. alld lb. .30½- —
Stearate, dibasic, ctns., c.l. lb. .37 - —
l.c.l. lb. .38 - .42
monobasic, ctns., c.l. lb. .37 - —
l.c.l. lb. .38 - .42
tribasic, ctns., c.l. lb. .37 - —
l.c.l. lb. .38 - .42
Sulfate, coml., bulk, c.l., works. 100 lbs. 1.85 - —
grd., bgs., c.l., works ton.37.00 - —
lump, bgs., c.l., works ton.40.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
l.c.l., works, frt. equald. 100 lbs. 3.95 - —

Prices $1 per ton higher in the south.

USP, gran., dms., works lb. .16 - .18
powd., dms., works lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate, heavy).
Ambregris, gray, bots oz. 8.00 -10.00
Aminoazotoluene, base, bbls., 100% basis lb. 1.03 1.18
o-Aminobiphenyl, dms., c.l., works lb. .32½- —
l.c.l., works lb. .33 - —
tanks, works lb. .31 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½- —
l.c.l., dlvd. lb. .45 - —
tanks, dlvc lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., l.c.l., works lb. .60 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
smaller lots lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. .97 - .98
Aminophylline, USP 100-lb dms lb. 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.85.00 - —
refrigeration, tanks, works, frt. equald ton.87.50 - —
aqueous (29.4% NH_3), dms., c.l., dlvd. Metropolitan area 100 lbs. 3.60 - —
l.c.l., works 100 lbs. 4.00 - —
tanks, works, anhyd. basis. ton.88.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.65 -11.15
white, gran. (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .38 - —
Benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld lb. .80 - —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works. ton.319.50 - —
ton lots, ex whse ton.395.00 - —
smaller lots, ex whse ton.400.00 - —
Bicarbonate, dom., dms., c.l., works. 100 lbs. 6.50 - —
l.c.l., works 100 lbs. 8.00 - —
imp., dms., l.c.l. lb. .07¼- .08¼
Bichromate, dms., works lb. .42 - .43
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide, NF, gran., bbls lb. .40 - —

Powdered ammonium bromide 10c. per lb. higher.

Carbonate, USP, lump, dms lb. .16 - —

20° and 22° Baumé Water White and Commercial Grades Available in Tank Car Quantities from Niagara Falls, New York

20° Baumé Commercial Grade Muriatic Acid is also available for prompt tank car shipments from Carlsbad, New Mexico.

MURIATIC ACID

specifications

20° and 22° Baumé Water White Grade

COLOR.....WATER WHITE
IRON.....0.0001% MAXIMUM
FREE CHLORINE.....NONE
ARSENIC.....NONE
INORGANIC SALTS.0.002% MAXIMUM
SULFATES.....0.0003% MAXIMUM
ORGANIC MATTER 0.0002% MAXIMUM
SUSPENDED MATTER.....NONE

International's Muriatic Acid is produced from inorganic materials and, at the Niagara Falls Plant, is made directly by burning hydrogen with chlorine. You can be sure of the purity, quality and consistency of grade to specifications. Muriatic Acid, in the grade and quantity you require, is available for prompt shipments. We shall be glad to send samples on request.

International MINERALS CHEMICALS

MINING·REFINING·MANUFACTURING CAUSTIC POTASH—*all standard grades;* CARBONATE OF POTASH—*all standard grades;* POTASSIUM CHLORIDE—*refined and technical grades;* SULFATE OF POTASH; LIQUID CHLORINE; MURIATIC ACID.

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

Address all inquiries to Industrial Sales Dept., Potash Division
General Offices: 20 North Wacker Drive, Chicago 6
61 Broadway, New York 6 • Midland, Texas

Ammonium chloride, tech., white, gran., fines, bgs., c.l., works..100 lbs. 5.25 - —
l.c.l., works ....100 lbs. 7.00 - —
USP, gran., bbls., dms.....lb. .17¼- —
Citrate, dibasic, bbls.....lb. .75 - —
dms. .....lb. .30 - .85
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia, aqueous).
Hypophosphite, NF, dms.....lb 3.07 - —
Iodide, NF, dms., bots .....lb. 4.26 - 4.38
Linoleate, 80% dms, works lb. .50 - .55
Nitrate dom., fertilizer grade, 33.5% N., bgs., western, works, frt. equald ton.68.00 - —
with dolomite, 20.5%N, bgs., Hopewell, Va ton.51.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton. ton.70.00 - —
western bgs., c.l., f.o.b. cars, Los Angeles.ton.82.84 - —
Oxalate, fine gran., dms lb. .26½- .31
Pentaborate, gran., bgs., c.l., works..ton.187.50 - —
ton lots, ex whse ....ton.271.50 - —
smaller lots, ex whse....ton.276.50 - —
Ammonium pentaborate powder $10 per ton higher
Persulfate, kgs.....lb. .38 - .47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09 - —
l.c.l., same basis ....lb. .0935- —
dibasic, NF, V bbls., dms. .lb. .46 - —
tech. bgs c.l works, frt. equald lb. .09 - —
l.c.l., same basis .....lb. .0935- —
Salicylate, NF, dms., kgs ....lb. 1.62 1.64
Silicofluoride, dms., works....lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works, lb. .18 - —
l.c.l., works ..... lb. .22 - —
Sulfate coke-oven, bulk, producing ovens, base price.....ton.42.00 -45.00
Oct.-Dec. shipt .....ton.41.00 -44.00
syn., bulk, c.l., works.....ton.42.00 -46.00
Oct.-Dec. shipt. .....ton.41.00 -45.00
purif., dms., works ..... lb. .09 - .09½
Sulfide, liq., 40-44%, dms., c.l., frt. equald., 100% basis. ton.240.00 - —
l.c.l., works, 100% basis. ton.390.00 - —
tanks, frt. alld., 100% basis. ton.180.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.55
highly purif., cbys., 100% basis. lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, fib. dms., frt. alld ....lb. .65 - —
60% soln., dms., c.l., works lb. .06½- —
d-Amphetamine hydrochloride dibasic, bots..lb.28.00 - —
dl, dms .....lb. 6.00 - —
d-monobasic, bots.....lb.28.00 - —
d-Phosphate, dibasic, bots.....lb.28.00 - —
dl, dms .....lb. 6.00 - —
d-Sulfate, dms.....lb.28.00 - —
dl, dms .....lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., frt. alld. E. of Rockies lb. .22 - —
l.c.l., same basis .....lb. .23 - —
tanks, same basis .....lb. .20 - —
syn., oxo process, dms., c.l., dlvd.....lb. .19¼- —
l.c.l., dlvd.....lb. .20¼- —
tanks, dlvd.....lb. .17¼- —
ex pentane, reg., dms., c.l., dlvd..lb. .17 - —
l.c.l., dlvd.....lb. .18 - —
tanks, dlvd.....lb. .15 - —
tech., dms., c.l., dlvd....lb. .15 - —
l.c.l., dlvd.....lb. .16 - —
tanks, dlvd .....lb. .13 - —
Alcohol (see Aiconol amyD.
n-butyrate, dms. .....lb. .90 - 1.25
Cinnamic, aldehyde, dms.....lb. 1.75 - 2.20
Nitrite, USP, bots .....lb. 1.75 - 1.83
Salicylate, cns., dms.....lb. .74 - 1.05
o-tert-Amyl phenol, dms., c.l., works. lb. .43 - —
l.c.l., works.....lb. .49 - —
tanks, works.....lb. .46 - —
p-tert-Amyl phenol, dms., c.l., works. lb. .25¾- —
l.c.l., works.....lb. .26¾- —
tanks, works.....lb. .24¾- —
Anethole, NF, cns., dms.....lb. 1.85 - —
tech., dms .....lb. 1.10 - —
Angelica root, dom., bls.....lb. .60 - .70
Aniline oil, dms., c.l., works, frt. alld..lb. .21 - —
l.c.l., works, frt. alld ....lb. .22 - —
tanks, works, frt. alld ....lb. .20 - —
Salt, dms., c.l., truckloads, 20,000 lbs., min., frt. alld..lb. .31 - —
l.c.l., same basis.....lb. .33 - —
Anise seed, Mexican, bgs.....lb. No prices.
Spanish, bgs. .....lb. .27 - .29
Anisic aldehyde, bots., dms.....lb. 1.80 - 2.70
o-Anisidine, dms., works.....lb. .88 - —
p-Anisidine, dms., works.....lb. .97 - —
Annatto seed, whole, bgs.....lb. .24 - —
powd., dms. .....lb. .28 - —
Anthracene, 90-95%, bbls., ton-lots, works lb. .70 - —
smaller lots, works ..... lb. .95 - —
Anthraquinone, 99.5%, bbls, c.l., frt. alld. lb. .83 - —
l.c.l., same basis.....lb. .86 - —
electrical grade, bbls., l.c.l., same basis..lb. .91 - —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines.....lb. .33 - —
cs., c.l., mines .....lb. .33½- —
Oxide, bgs., c.l., frt. alld.....lb. .29 - —
l.c.l., frt. alld .....lb. .30½- —
Sulfide, approx. 65%, bgs., dlvd. lb. .23 - .26
Trichloride, anhyd., solid, pails, c.l., works..lb. .41 - —
l.c.l., works.....lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms .lb. .60½- .65½
USP, powd., dms ..... lb. .64 - .65
Antipyrine, NF, 200-lb. bbls.....lb. 3.50 - —
Apomorphine hydrochloride, USP, bots..oz.23.40 -23.90
Areca nuts, powd., bbls ..... lb. .15 - .16
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms. 1 kilo lots .kilo.74.00 -83.00
Arnica flowers (true montana), bls. lb. 3.00 Nom.
Arsenic metal, lump, bbls., ex whse. lb. .54 - —
Trioxide, USP, dms.....lb. .48 - —
White, powd., bbls., c.l., dlvd..lb. .05½- —
l.c.l., dlvd.....lb. .06½- .07½
Asafetida, cs.....lb. .38 - .39
powd., bbls., dms.....lb. .50 - .53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines ton.1,300.00 - —
No. 2, c.l. (20 tons), mines.ton.675.00 - —
Run-of-mine, c.l., (20 tons), mines ton.556.00 - —
3K, c.l. (20 tons), mines ton.436.00 - —
3R, c.l. (20 tons), mines ton.371.00 - —
3T, c.l. (20 tons), mines ton.348.00 - —
3Z, c.l. (20 tons), mines..ton.321.00 - —

Asbestos, Canadian, crude, 4K, c.l. (20 tons), mines..ton.173.00 - —
4M, c.l. (20 tons), mines ton.173.00 - —
4T, c.l. (20 tons), mines ton.156.00 - —
4Z, c.l. (20 tons), mines..ton.156.00 - —
5D, c.l. (20 tons), mines..ton.122.50 - —
5K, c.l. (20 tons), mines..ton.122.50 - —
5M, c.l. (20 tons), mines..ton.116.50 - —
5R, c.l. (20 tons), mines ton.110.00 - —
6D, c.l. (30 tons), mines ton.78.00 - —
7D, c.l. (30 tons), mines ton.68.50 - —
7F, c.l., (30 tons), mines..ton.65.00 - —
7H, c.l. (30 tons), mines ton.55.00 - —
7K, c.l. (30 tons), mines ton.46.00 - —
7M, c.l., (30 tons), mines..ton.40.00 - —
7R, c.l. (30 tons), mines ton.39.00 - —
7RF, c.l. (30 tons), mines ton.40.00 - —
7T, c.l. (30 tons), mines ton.37.00 - —
7TF, c.l. (30 tons), mines ton.40.00 - —
8S, c.l., (30 tons), mines..ton.27.00 - —
Asbestos c.l. prices are in U. S. funds, l.c.l., lots $4 per ton higher.
Asphalt gilsonite, black, jet, bgs., c.l., mines ton.37.00 - —
select, 350° F., fusing pt., bgs., c.l., mines ton.38.00 - —
select, 270°-295°F., fusing pt. bgs., c.l., mines ton.37.00 - —
seconds, 300° - 390°F fusing pt., bgs., c.l., mines ton.32.00 - —
Manjak, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy..gal. .09 - —
emulsion, tanks, tankwagon, refy gal. .09¼- .10
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin (see Acid, acetylsalicylic).
Atropine, USP, bots .....oz. 6.25 - 6.75
Sulfate, USP, bots.....oz. 4.00 - 4.20

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 - —
less than 1,000,000,000 units 50,000 units. .75 - —
Balm of Gilead buds, dried, bgs..lb. 1.35 - 1.45
Barberry, root bark, bgs.....lb. .28 - .30
Barbital, USP, 100-lb. dms.....lb. 4.50 - —
Sodium, USP, dms .....lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works..ton.100.00 - —
smaller lots, works.....ton.110.00 - —
Chlorate, kgs., works .....lb. .32 - .36
Chloride, anhyd., bgs., c.l., works. ton.165.00 - —
l.c.l., works .....ton.175.00 - —
NF, cryst., dms.....lb. .20 - —
tech., cryst., dms., c.l., works. 100 lbs. 6.50 - —
l.c.l., works.....100 lbs. 7.00 - —
Chromate, bgs., frt. equald ..lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, cryst., bgs .....ton.190.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., works.....lb. .12¼- —
l.c.l. works lb. .14 - —
Oxide, grd., dms., frt. equald.. ton.235.00 - —
l.c.l., works.....ton.265.00 - —
Peroxide, dms., works.....lb. .16 - —
Stearate, ctns., c.l., frt. alld..lb. .39 - —
l.c.l., same basis .....lb. .40 - .44
Sulfate, tech. (see Barytes and Blanc fixe).
X-ray, dms. .....lb. .15 - .15½
Sulfide, dms., c.l., works....ton.85.00 - —
l.c.l., works.....ton.95.00 - —

Ammonium Chloride—Benzol, Coaltar

Barytes, Southern, off-color, bgs., mines ton.25.00 - —
95-75%, bgs., mines ..... ton.25.00 - —
water-grd., paper bgs., c.l., E. St. Louis..ton.45.00 - —
ex-whse, N. Y.....ton.65.10 - —
Bauxite, bulk, mines .....ton. 6.75 -10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls ..... lb. .35 - .37
root, bls ..... lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton.14.00 - —
imp. ftalian, white, high gel., bgs., 5-ton lots, ex whse ton.80.60 - —
1 ton-lots, ex whse ton.83.10 - —
low gel., bgs., 5-ton lots, ex whse ton.78.95 - —
1-ton lots, ex whse ...ton.81.45 - —
Benzal chloride, cbys., works....lb. .22 - .23½
Benzaldehyde, NF, dms.....lb. .74 - 1.05
tech., cbys., dms .....lb. .44 - —
Benzene (see Benzol.
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., high gamma, bgs., c.l., dlvd., gamma unit-lb. .0075- —
l.c.l., works, gamma unit-lb. .009 - —
low gamma, bgs., c.l., dlvd., gamma unit-lb. .007 - .0075
l.c.l., works, gamma unit-lb. .0075- .009
Benzidine hydrochloride, bbls., frt. alld., 100% basis lb 1.00 —
Benzocaine, dms. .....lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa ..... gal. .36 - —
Birmingham district gal. .36 - —

An important new source of

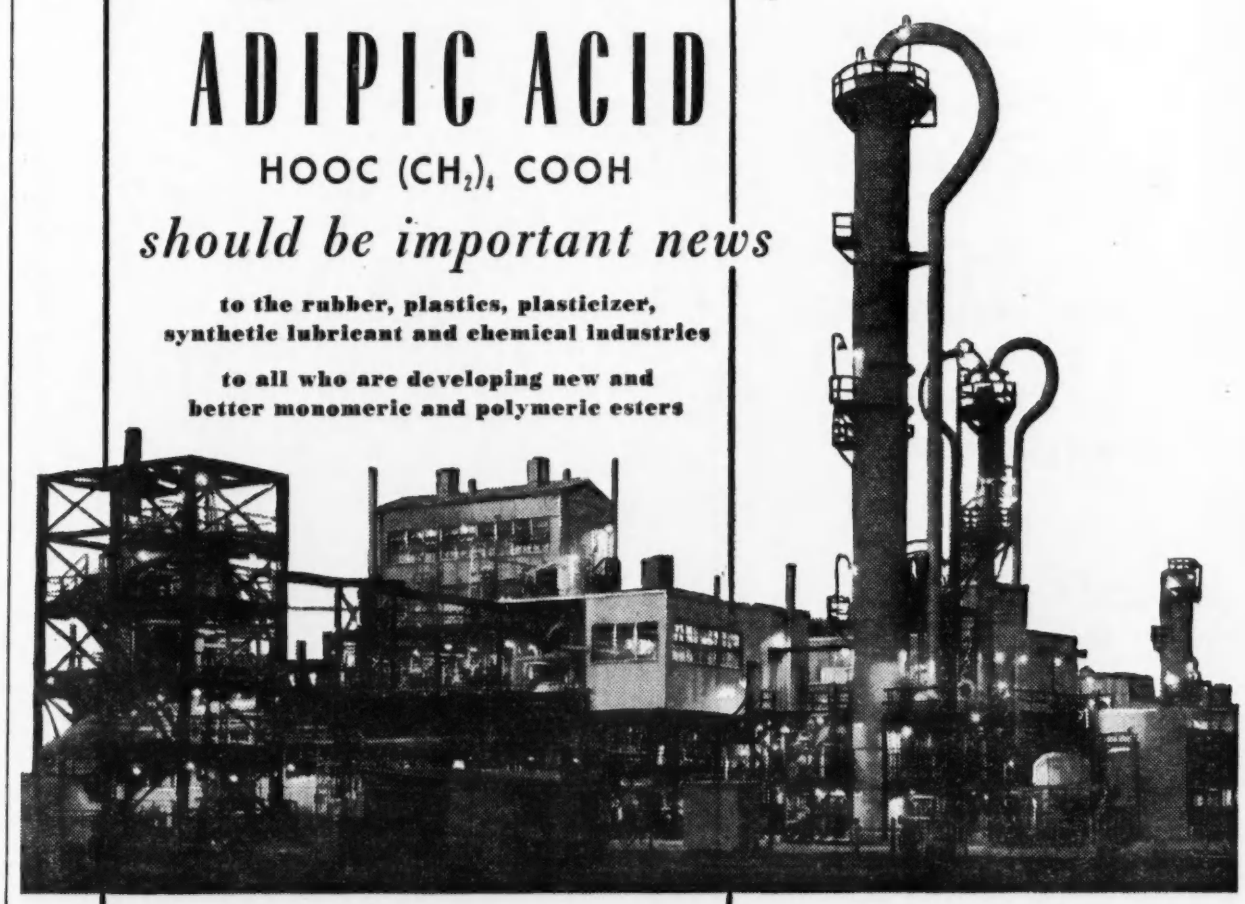
ADIPIC ACID

HOOC $(CH_2)_4$ COOH

should be important news

to the rubber, plastics, plasticizer, synthetic lubricant and chemical industries

to all who are developing new and better monomeric and polymeric esters



National Aniline's new Adipic Acid plant at Hopewell, Virginia is important to America and to American industry. For its production of this versatile dicarboxylic acid will be both substantial and basic.

Through Allied Chemical resources, it is completely integrated right back to the most basic raw materials. Through Allied Chemical research, the manufacturing process is efficient, uniform, continuous. Through modern plant engineering and construction, its output will be competitive in every respect.

From present and potential users of ADIPIC ACID, we invite inquiries for samples, technical data and quotations on price and delivery.

SEND FOR TECHNICAL BULLETIN I-12

This comprehensive 8-page technical bulletin on National Adipic Acid gives physical and chemical properties; principal reactions on the carboxyl and alpha methylene groups; solubility curve, and suggested uses with copious literature references. Your copy will be sent without obligation on request.

NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR STREET, NEW YORK 6, N. Y.

Allied Chemical

Boston Providence Philadelphia Chicago San Francisco Portland, Ore. Greensboro Charlotte Richmond Atlanta Los Angeles Columbus, Ga. New Orleans Chattanooga Toronto

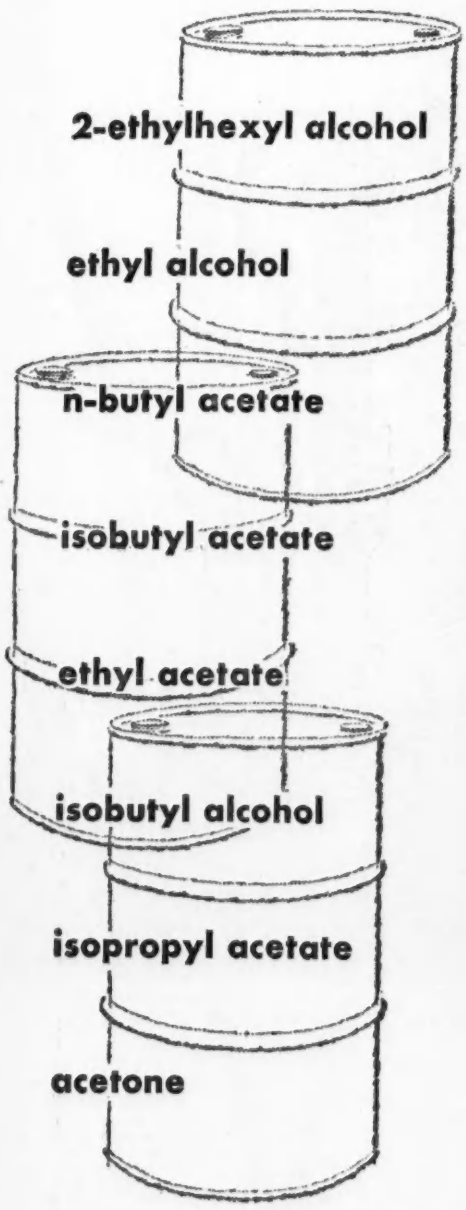
Benzol, Coaltar—Butyl Ether

Benzol, coaltar, pure or nitration, tanks, works:—
Chicago district gal. .36 • —
Cleveland district gal. .36 • —
Geneva, Utah gal. .36 • —
Johnstown, Pa. gal. .36 • —
Lackawanna, N. Y. gal. .36 • —
Lone Star, Texas gal. .36 • —
Lorain, Ohio gal. .36 • —
Middletown, Ohio gal. .36 • —
Minnequa, Colo gal. .36 • —
Philadelphia district gal. .36 • —
Pittsburgh district gal. .36 • —
Sparrows Point, Md. gal. .36 • —
Syracuse, N. Y. gal. .36 • —
Terre Haute, Ind. gal. .36 • —
Youngstown, Ohio gal. .36 • —
Benzophenone, dms. lb. 1.40 • 1.70
Benzotrichloride, cbys., frt equald. lb. .18 • .20
Benzoyl chloride, cbys., dms., c.l., works, frt equald lb. .22 • —
l.c.l., same basis lb. .23 • —
tank trucks, dlvd. Metropolitan area lb. .21 • —
Peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works lb. .98 1.08
Benzyl acetate t.f.c. cns. dms lb. .62 1.10
Alcohol (see Alcohol, benzyl)
Benzoate, USP, f.f.c. cns. dms lb. .62 1.10
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald lb. .23 • —
l.c.l., same basis lb. .24 • —
tank trucks, same basis lb. .21 • —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices were ½c. lower.
Cinnamate, cns. lb 3.60 • 3.90
Formate, cns. lb 1.30 • 2.10
Isoeugenol, cns. lb 8.00 • 9.10
Propionate, bots. lb 1.35 • 1.65
Salicylate, bots. lb 1.50 • 1.85

Benzylidine acetone, bots. lb. 1.68 • 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns. lb. 35.00 • 36.25
Hydrochloride, bots. lb. 35.00 • 36.25
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical)
Biotin cryst., bots gram 10.00 • —
Biphenyl (see Diphenyl).
Bismuth chloride, jars lb. 2.11 • —
Hydroxide, dms. lb. 4.65 • —
Metal, bxs., ton lots lb. 2.25 • —
Nitrate, cryst., dms. lb. 2.10 • 2.17
Oxide, anhyd., dms. lb. 4.47 • 5.05
Oxychloride, dms. lb. 4.37 • 4.42
Phenolsulfonate, fib. dms. lb. 5.22 • —
Subcarbonate, USP, dms. lb. 3.20 • —
Subgallate, NF, fib. dms. lb. 3.15 • —
Subiodide, fib. dms. lb. 5.37 • —
Subnitrate, NF, dms. lb. 2.65 • —
Subsalicylate, USP, dms. lb. 3.50 • —
Bismuth-ammonium citrate, USP, powd. jars lb. 4.22 • —
Black, acetylene, imp., bgs., c.l., duty and freight extra lb. .17 • —
cs., l.c.l., ex whse lb. .22½ • .26
Ash (see Barium sulfide).
Bone, dms., t.c.l., frt alld lb. .17 • .23¼
Pacific coast bone black prices, 2c. per lb. higher

Black, carbon, channel, pigment, high color, beads, etns., c.l., works lb. .72 • —
l.c.l., dlvd. or whse. lb. .78 • —
medium color, uncompressed, bgs., c.l., works, lb. .12 • —
l.c.l., dlvd. or whse, lb. .19 • —
rubber, beads, bulk, c.l., works lb. .07 • —
bgs., c.l., works lb. .074 • —
l.c.l., works lb. .1223- —
furnace, fast extruding, bgs., c.l., works lb. .06 • —
etns., l.c.l., whse lb. .10 • —
high abrasion, bulk, c.l., works, lb. .0750- —
bgs., c.l., works lb. .0790- —
l.c.l., dlvd. or whse lb. .122 • .125
high modulus, bgs., c.l., works, lb. .0550- —
etns., l.c.l., whse lb. .0950- —
semi-reinforcing bgs., c.l., works lb. .045 • —
bgs., etns., l.c.l., whse lb. .085 • —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works lb. .13¼- —
l.c.l., works lb. .13½- —
Lamp, bgs., c.l., works lb. .16 • .45
Mineral, bgs., works lb. .0160- .0675
Blackberry root bark, bls. lb. .45 • —
Black haw root bark, bls. lb. .63 • .65
tree bark, bls lb. .40 • .45
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 • —
l.c.l., works ton 200.00 • —
direct process, bgs., c.l., works, ton 100.00 • —
l.c.l., works ton 110.00 • —
N. Y. whse. ton 140.88 -165.00

Bleaching powder, dms., c.l., works, 100 lbs. 5.02 • —
l.c.l., works 100 lbs. 6.52 • —
Blood, dried, 16-16½% ammonia, bgs. unit-ton. 5.50 • —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 5.50 • —
soluble, bgs., c.l. lb. .14 • .17
l.c.l. lb. .18 • .25
Bloodroot bls. lb. .48 • .50
Blue, alkali, dry, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.10 • —
toner, 125-lb. bbls., litho flushed, same basis lb. 1.20 • —
Chinese, bbls., same basis lb. .49 • —
Cobalt, genuine, bbls., same basis lb. 4.90 • —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash, Prussian and Soda)
Methyl violet toner, molybdated, PMA, bbls., same basis lb. 2.60 • —
tungstated, PTMA, bbls., same basis lb. 4.00 • —
Milori, bbls., same basis lb. .49 • —
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .75 • —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 • —
resinated, bbls., same basis lb. 3.00 • —
water dispersable, bbls., same basis lb. 1.54 • —
Potash, CP, bbls., same basis lb. .56 • —
Prussian, insoluble, bbls., same basis lb. .49 • —
soluble, bbls., same basis lb. .49 • —
Soda, CP, bronze, bbls., same basis lb. .56 • —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .30½- .35
jobbing types, bbls., same basis, lb. .16½- .18½
regular types, dry, bbls., same basis lb. .22½- .35
Victoria toner, molybdated, PMA, bbls lb. 4.10 • —
tungstated, PTMA, bbls lb. 5.15 • —
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vitrol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E. ton 65.00 • —
Los Angeles ton 82.00 • —
Bone phosphate defluorinated (see D)
of lime (see Calcium phosphate, tribasic).
precipatated (see Calcium phosphate tribasic, NF, precip.).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 80.50 • —
ton lots ex whse, N. Y. or Chicago ton 130.25 • —
bulk, c.l., works ton 71.50 • —
cryst., 99½%, bgs., c.l., works, ton 69.25 • —
ton lots, ex-whse, N. Y. or Chi ton 119.00 —
smaller lots, same basis, ton 124.00 • —
gran., decahydrate, 99½%, bgs., c.l., works ton 43.25 • —
ton lots, ex whse., N. Y., Chi ton 93.00 • —
smaller lots, same basis, ton 98.00 • —
bulk, c.l., works ton 36.75 • —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 • —
ton lots, ex whse., N.Y., Chi ton 107.50 • —
smaller lots, same basis, ton 112.50 • —
bulk, c.l., works ton 51.25 • —
powd., 99½%, bgs., c.l., works, ton 48.25 • —
ton lots, ex-whse., N. Y. or Chi ton 98.00 • —
smaller lots, same basis, ton 103.00 • —
Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt lb. .18 • .24
l.c.l., same basis lb. .19 • .26
Borneol, cns lb. 2.50 • 4.50
Borontrifluoride gas, cyls., truckload, works lb. .62 • —
lers truckload, works lb. .70 • —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .31 • —
l.c.l., same basis lb. .33 • .38
ref. dms., c.l., t.l., dlvd. E. of Rockies lb. .30 • —
l.c.l., same basis lb. .30 • .32
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
l.c.l., same basis lb. .50 • —
Bromoform, pharmaceutical grade, bots. lb. 1.62 • 2.60
cbys. lb. 1.52 • —
Bromstyrol, bots lb. 5.40 • 5.70
Bronze powder, aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works lb. .14¼- —
l.c.l., works lb. .14½- —
Oxide, metallic, bgs., works lb. .04 • —
Sienna, burnt., paper bgs., c.l., works lb. .04¼- .15¼
l.c.l., works lb. .04½- .15½
raw, paper bgs., c.l., works lb. .04½- .13
l.c.l., works lb. .04¾- .13¼
Umber, burnt., American, bgs., c.l., works lb. .06 • —
l.c.l., works lb. .06¼- .07
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .06¾- —
l.c.l., works lb. .07 • —
raw, American, bgs., works lb. .06¼- .06½
Turkey-type, bgs., works lb. .06¾- .07
Vandyke, bbls., works lb. .09½- .12
Brucine, cns., 100-oz. lots oz. .20 • .25
Sulfate, NF, cns., 100-oz. lots oz. .15 • .20
Buchu leaves, bls lb. .05 • —
Butadiene, refd., cyls., c.l. refy lb. .21 • —
l.c.l., refy. lb. .22 • —
tanks, refy lb. .15 • —
Butane, indust., tanks, group 3 gal. .02½- —
N. Y. harbor gal. .08 • —
n-Butyl acetate, ferment., dms., c.l., frt. alld. lb. .15 • —
l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
syn., dms., c.l., dlvd. E. lb. .15 • —
l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
sec-Butyl acetate, syn., dms., c.l., dlvd. E. lb. .12½- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works lb. .37¼- —
c.l. works lb. .38 • —
Ether, dms., c.l., works lb. .32¾- —
l.c.l., works lb. .33¼- —
tanks, works lb. .31 • —



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CHEMICAL PRODUCTS, INC.
Kingsport, Tennessee
(subsidiary of EASTMAN KODAK COMPANY)

Eastman
solvents

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Butyl lactate, dms., c.l., frt. alld, E. of Rockies lb. .42 - —
t.c.l., same basis lb. .47 - —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate, dms., c.l., t.l., works. lb. .70 - —
t.c.l., works lb. .55½- —
Oleate refd., dms., t.c.l., works lb. .32 - —
Phenylacetate, dms. lb. 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., t.c.l., frt. equald. lb. .25 - .27
t.c.l., works lb. .26½- —
Butylamine (see mono-, di-, and tri-).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .49 - —
t.c.l., works lb. .50 - —
tanks, works lb. .48 - —
p-tert-Butylphenol, bgs., c.l., works. lb. .25½- —
Butyraldehyde, dms., c.l., dlvd. lb. .21½- —
t.c.l. dlvd lb. .22½- —
tanks, dlvd lb. .19½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide, 25-lb. fib. dms lb. 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms., 100-lib. lots or more lb. 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb. lots or more. lb. 2.80 - —
citrated, USP, dms., 100-lb. lots or more lb. 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots, works. gram. .65 - —
in edible oil (see Viosterol).
Calcium p-aminosalicylate, fib., dms., 1,000 lb. lots, frt. adjusted lb. 7.00 - —
smaller lots same basis lb. 7.05 - 7.50
Arsenate, dealers, drums., c.l., whse., works, frt. alld. cn 96 lbs. or over lb. .09 - .10
t.c.l., same basis lb. .10 —
Bromide, NF, jars lb. .94 - .98
Carbide, standard generator size, dms., c.l., dlvd ton.134.40 - —
Carbonate, nat., dry-grd., air floated., 325 mesh, bgs., c.l., works ton. 7.50 -10.00
chalk whiting, 325 mesh, bgs., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
precip., dense, bgs., c.l., works. ton.30.00 -33.00
t.c.l. works ton.40.00 -48.00
medium, bgs., c.l., works ton.35.00 —
t.c.l. works ton.45.00 -50.00
surface treated, bgs., c.l., works ton.35.00 -50.00
t.c.l., works ton.45.00 -65.00
ultrafine, bgs., c.l., works. ton.110.00 160.00
t.c.l., works ton.120.00 175.00
Chloride, cryst., purif., dms. lb .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton.29.00 - —
liquor, 40%, tanks, frt. equald. ton.12.35 - —
pellets, bgs., c.l., works ton.35.00 - —
powd., bgs., c.l., works ton.39.65 - —
solid, 73-75%, dms., c.l., frt. equald ton.27.50 - —
t.c.l., works, same basis. ton.34.00 -71.00
USP, gran., dms. lb. .32 - —
Chromate, bgs., frt. equald lb. 29½- .30
Cyanide, dms., dlvd E. of Rockies lb. .24 - .50
Cyclamate, 100-lb. fib. dms. lb. 2.95 - —
Gluconate, AA, bbls., dms. lb. .70 - .72
USP, bbls., dms lb. .53 .65
Hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies cs.22.60 -24.75
dms. 100-lb., same basis dm.28.65 -32.50
Hypophosphite, dms., ton lots or less lb .90 - .93
Iodide, jars lb. 4.52 - —
Lactate, USP, dms., 10,000-lb. lots or more, works lb. .40 - —
smaller lots, works lb .41 .48
Mandelate, USP, dms, works lb. 2.10 - 2.25
Naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼- —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton.46.00 - —
tech., dms., works lb. .13 - —
Pantothenate, jars, 100-gram lots or more, frt. adjusted gram. .06 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate).
Phenolsulfonate, dms lb. .70 - —
Phosphate dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
t.c.l., frt. equald 100 lbs. 8.50 - —
feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.74.00 - —
t.c.l., frt. equald ton.79.00 - —
20% P, bgs., c.l., t.l., frt. equald ton.84.55 - —
t.c.l., frt. equald ton.96.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.84.00 - —
t.c.l., frt. equald ton.89.00 - —
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.90 - —
smaller lots, same basis, 100 lbs. 7.40 - —
tribasic, NF, precip., bgs., c.l., frt. equald 100 lbs. 8.25 - —
t.c.l., frt. equald 100 lbs. 9.00 - —
Phytate, bgs., works lb. .37 - —
Resinate, precip., dms., frt. alld., works lb. .30½- —
Silicate, hydrated, bgs., c.l., works. lb. .06 - —
t.c.l., works lb. .06½- —
paint grade (see Wollastonite).
Stearate, cns., c.l. lb. .37 - —
t.c.l. lb. .38 - .42
Sulfate (see Gypsum).
Calomel, USP, powd., dms lb. 5.42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .15 - —
t.c.l., same basis lb. .16½- —
Chlorinated 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.25 - 3.67
nat. USP powd. cs., 100-lb. lots. lb. .85 - —
tablets, 1-oz., ½-oz. cs. lb. .85 - —
syn., tech., 1 bbl. or more lb. .52 - —
USP, gran. powd. bbls. 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).

Cantharides, Chinese, cs. lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs. lb. 4.00 - 4.05
powd., bxs. lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb. 4.50 - 5.25
from African pepper, dms. lb. 4.35 - 5.00
Caraway seed, Dutch, bgs. lb. .18 - .18½
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbinol, methyl isobutyl (see Methyl isobutyl carbinol).
Carbon dioxide, indust., wholesale, bulk, dlvd. metropolitan area. ton.73.00 -115.00
cyls., same basis lb. .08 - —
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. alld. to competitive points lb. .07 - —
t.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, same basis lb. .0515- —
Tetrachloride, CP, consumers dms., c.l., t.c.l., frt. alld lb. .11½- .13¾
tech., consumers, dms. c.l. E. Rockies, frt. alld lb. .10½- —
W. of Rockies, f.o.b. stockpoints lb. .11 - —
t.c.l., E. of Rockies, frt. alld lb. .12¾- —
W. of Rockies, f.o.b. stockpoints lb. .13¼- —
tanks, E. of Rockies, frt. alld lb. .09½- —
W. of Rockies, f.o.b. stockpoints lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal NF, dms. 100-lb lots, works lb 4.00 - 4.25
smaller lots, works lb 4.10 4.75

Cardamom fruit, fancy, bold, cs lb. 3.88 - —
selected, bleached, cs lb. 3.65 - —
decorticated, Ceylon, cs lb. 2.90 - —
Guatemalan, cs. lb. 2.25 - —
green, Ceylon, bgs. lb. 1.90 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd lb.14.40 - —
smaller lots, dlvd lb.14.50 -15.20
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .38 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units. .12 - —
Microcrystalline in oil, 400,000 A units per gram., dms., dlvd., million units. .26 - —
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram. .40 - —
in vegetable oil, 400,000 A units per gram, cns. gram. .096 - —
Carvol, bots. lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .30 - .31
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt. point lb. .27 - .30
premium, bgs., 10,000-lb. lots or more, shipt. point lb. .35 - .40
imp., Argentine, acid-precip., grd., bgs., c.l., duty paid lb. .25½- .26
New Zealand, same basis lb. .26½- .27½
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —

Cassia, Batavia, cuttings, bls. lb. .16 - —
longstick, cracked, bls. lb. .18 - .22
shortstick, cracked, bls. lb. .17 - —
Corinje, bls. lb. .17 - .19
Castor beans, bgs., f.o.b. Brazil ton.130.00 - —
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton. No stocks.
Castoreum, nat., cns lb 5.00 -30.00
syn., cns lb 9.00 —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls lb. .75 - —
Celery seed, French, bgs lb. .29 - —
Indian, bgs. .16 - —
Cellulose acetate, flake, powd., ctns., bgs. 100-lb lots or more, dlvd E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd E. lb. .543 .553
27% butyryl content, bgs., dlvd. E lb. .595 .605
38% butyryl content, bgs., dlvd. E lb. .545 .555
50% butyryl content, bgs., dlvd E lb. .585 - .595
half-second, bgs., dlvd. E. lb. .545 - .555
Scrap (see Pyroxylin scrap).
Cerium chloride, dms., dlvd. lb. .35 - —
Hydrate, 74% CeO_2, fib. dms., 100-lb. lots or more lb. 1.44 - —
77% CeO_2, fib. dms., 100-lb. lots or more lb. 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.32 - —
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate).

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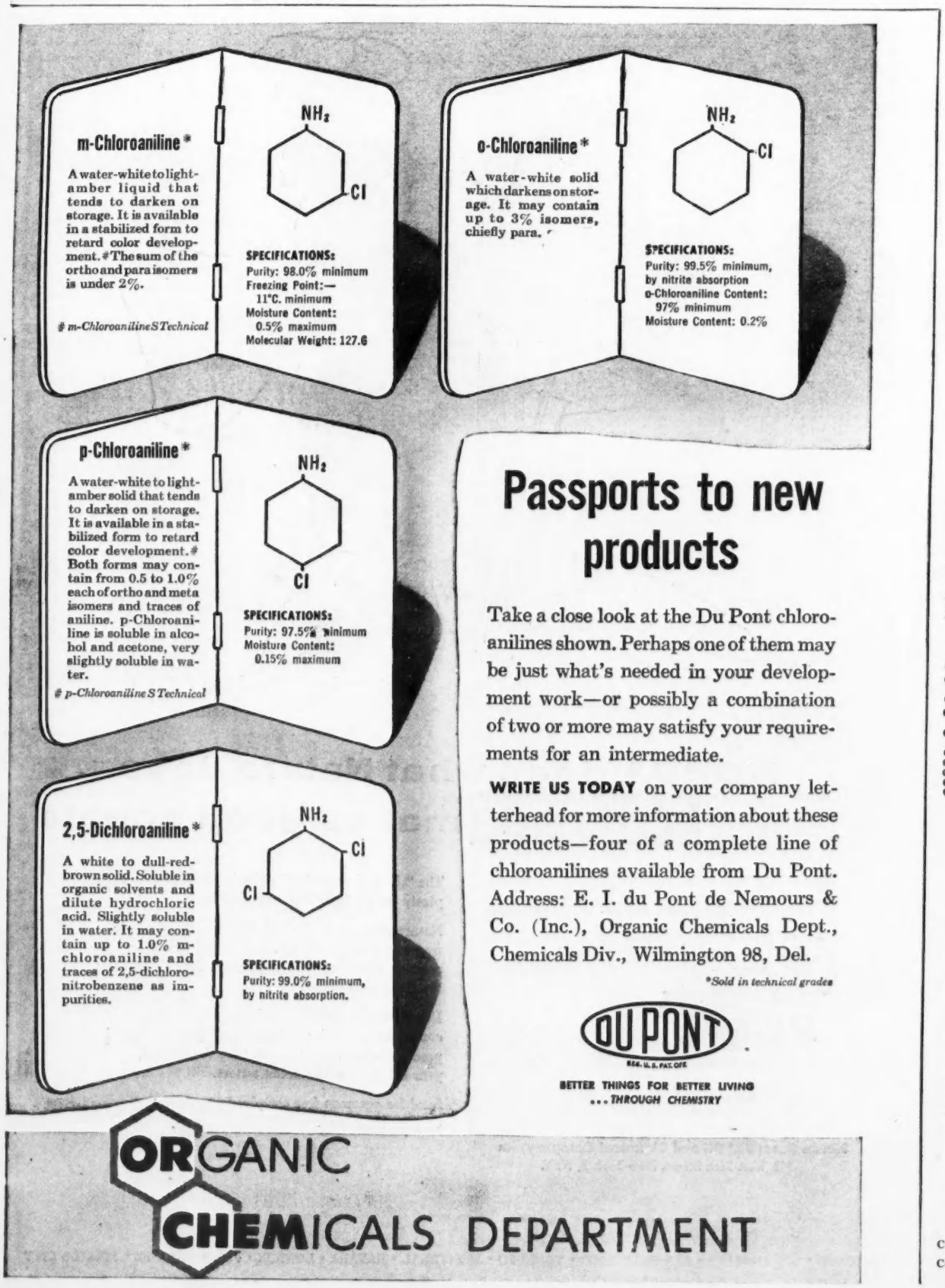
Chamomile Flowers—Coriander Seed

Chamomile flowers, Hungarian style, cs lb. .85 - —
Roman, cs lb. 1.50 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .25½- .32½
smaller lots works lb. .27 - .50
Bone (see Black, bone)
Hardwood, briquets, bulk, c.l., f.o.b. plant ton.72.00 -75.00
40-lb. paper bgs., same basis, ton.76.00 - —
Pinewood, gran., powd., bgs., c.l., works, South ton.55.00 - —
c.l., works, South ton.55.00 -65.00
lump bgs., c.l., works, South ton.51.50 - —
l.c.l., works, South ton.54.50 -69.00
bulk, c.l., works, South ton.56.00 - —
Chestnut extract, liq., 25% tannin, tanks, works lb. .04 - —
powd., 60% tannin, bgs., extra, c.l., works lb. .1032- —
l.c.l., works lb. .1102- —
Chloral, tech., 94% min., dms., c.l. works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.00 - —
500-lb. lots lb. 1.03 - —
100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt alld lb. .65 - —
l.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .66 - —
clarif., dms., c.l., frt. alld lb. .69 - —
l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —

Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .13¼- —
l.c.l., same basis lb. .16½- —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.05 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.92 - —
3 cars, same basis 100 lbs. 4.12 - —
2 cars, same basis 100 lbs. 5.12 - —
1 car, same basis 100 lbs. 7.12 - —
4-Chloro-2-aminotoluene, fused, bbls, lb. 1.45 - —
m-Chloroaniline, dms., c.l., frt. equald lb. .75 - —
l.c.l., same basis lb. .80 - —
o-Chloroaniline, dms., c.l., works, frt. equald lb. .70 - —
l.c.l., same basis lb. .72 - —
p-Chloroaniline, dms., c.l., works, frt. equald lb. .75 - —
o-Chlorobenzaldehyde, dms., works. lb. 1.20 - —
p-Chlorobenzaldehyde, dms., works. lb. 2.00 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —

2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald, lb. .35½- —
l.c.l., same basis lb. .36½- —
p-Chlorophenol, dms., c.l., frt. equald lb. .35½- —
l.c.l., same basis lb. .36½- —
Chlorophyll, oil-soluble, not fixed, 4%, pails, tins, works lb. 4.25 - —
copper fixed, 6½%, tins, pails, works lb. 4.25 - —
dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14%, dms, works lb. 8.90 - —
conc., dom., 50%, dms., works, 100% basis lb.42.00 - —
75%, dms., works, 100% basis lb.45.00 - —
90%-100%, dms., works, 100% basis lb.45.00 - —
imp., 60%, tins, 100% basis, lb.58.00 - —
75%, tins, 100% basis lb.58.00 - —
90%, tins, 100% basis lb.58.00 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 180 lbs., frt. alld lb. .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Cholesterol, USP, fib. dms., 100-lb. lots lb. 6.85 - 9.00
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chloride, fib. dms., frt. adjusted, lb. 1.25 - 1.35
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).

Chromium oxide (see Green chromium oxide).
Trioxide, NF bots lb. .62 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine, cryst., cns., 100-oz. lots, oz. .65 - —
Sulfate, cns., 100-oz. lots oz. .35 - —
Cinchonine, cryst., cns., 100-oz. lots, oz. .52 - .57
Sulfate, NF, cns., 100-oz. lots oz. .27½- .30½
Cinchophen, NF, heavy density, dms., frt. adjusted lb. 3.70 - 4.05
standard density, dms., same basis lb. 3.50 - 3.85
Cinchophen-sodium, dms., frt. adjusted lb. 4.50 - 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Aldehyde, cns., dms. lb. 1.00 - 1.30
Cinnamon, Ceylon, No. 2, bgs lb. .68 - —
"0000," bgs., afloat lb. .86 - —
Citral, bots., cns lb. 5.65 - 5.90
Citronellal, bots., dms lb. 3.10 - —
Citronellol, bots., dms. lb. 4.85 - 5.15
Civet, artif., bots lb.13.75 -15.00
nat., bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l. Tenn ton.20.50 - —
imp., airfloated, bgs., c.l., Atl. port..long ton.42.00 -45.00
lump, bulk, Atl. port..long ton.27.00 -30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton.10.00 - —
l.c.l. Georgia, works, ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works..ton.13.50 -14.50
l.c.l. ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 —
l.c.l., ex whse..net ton.60.00 -65.00
Clove, madagascar, bgs lb. .42 - —
Zanzibar, bgs lb. .46 - —
CMC, crude, 96%, low or medium vis., bgs., or fib. dms., 23,000 lbs., dlvd. E., 100% basis, lb. .37 - —
less than 23,000 lbs., dlvd. E. 100% basis lb. .41 - —
65%, low or medium vis, bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .37 - —
l.c.l., dlvd. E., 100% basis, lb. .41 - —
purif., high vis. (see Gum Cellulose).
Standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. 57 - —
CMC prices W. of the Rockies are 2c. per lb. lower, and are on a works basis.
Coaltar, crude, resale for solns., dms., c.l., ex-whse gal. .255 - —
l.c.l., ex-whse gal. .275 - —
tanks, ex works gal. .155 - .159
refd., resale, dms., c.l., ex-whse, gal. .2650- .32
l.c.l., ex-whse gal. .2850- .34
tanks, ex-whse gal. .1650- .1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - —
Carbonate, 46% powd., bgs., dlvd, lb. 2.15 - —
Chloride, 24.2% Co. kgs., dlvd., lb. 1.20 - —
Hydrate, 60-61% Co. bbls., dlvd. lb. 2.72 - —
Linoleate, fused, 8½% Co., dms. lb. .75¼- —
liq., 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co, bbls., dlvd lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused, 3% Co., dms, lb. .29¼- —
Sulfate, cryst. 21% Co., dms., dlvd lb. .89 - —
monohydrated, 33% Co., dms., dlvd lb. 1.40 - —
Tallate, 6% Co., dms., dlvd lb. .43¼- —
Cocaine, USP, cns., 100-oz. lots oz..17.80 - —
Hydrochloride, cns., 100-oz. lots, oz.13.75 - —
Cocillana bark, bgs lb. .40 - .50
Cocoa, butter, bgs lb. .55 - .60
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Hydrochloride, cns., 100-oz. lots oz.11.75 - —
Phosphate, USP, cns., 100-oz. lots, oz.10.25 - —
Sulfate, USP, cns., 100-oz lots oz.10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz.33.50 -40.00
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .75 - 1.00
Collodion, USP, dms lb. .32½- —
flexible USP, dms lb. .34 - —
Colocynth, pulp, bls lb. .25 - .30
Colombo root, bls lb. No prices.
Condurango bark, bales lb. .40 - .50
Copaiba balsam, cns., dms lb. .90 - 1.20
Copper acetate, bbls., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
Carbonate, 55%, bgs., c.l., works, lb. .3625- —
l.c.l., works lb. .3775- —
Chloride, anhyd., bbls., works lb. .48 - .48½
cryst., bbls., works lb. .32¾- .33¼
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .80½- —
1,000-lb. lots or more lb. .81½- —
smaller lots lb. .83½- —
Gluconate, cns., dms lb. 3.00 - 3.24
Hydrate, dms., c.l., frt. alld. E. Miss lb. .55 - —
l.c.l., same basis lb. .55½- —
Metal, electrolytic, dlvd., Valley basis lb. .43 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Nitrate, tech., cryst., bbls., works, lb. .33¼- —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., 500-lb. lots or more, works lb. .57 - .61½
red, 97%, USN Type I, bbls., lb. .69½- .83½
90%, USN Type II, bbls., 500-lb. lots or more, works lb. .61½- .67½
Oxychloride, dms., c.l., works lb. .54¾- —
l.c.l., works lb. .55¼- .65¼
Quinolinate, fib. dms lb. 4.25 - 4.50
Resinate, precip., dms., frt. alld lb. .31½- —
Sulfate, CP, gran., bbls., works, lb. .2180- —
cryst., 99%, bgs., c.l., works, 100 lbs.14.90 - —
l.c.l., same basis 100 lbs.15.40 -17.90
monohydrated, 35% dms., c.l., works 100 lbs.24.00 - —
l.c.l., works 100 lbs.24.75 - —
tribasic, dealers, bgs., c.l., works, frt. equald 100 lbs.32.25 - —
c.l., same basis 100 lbs.33.25 -36.25
Undecylenate, dms lb. 2.90 - 3.00
Copra, Atl. Gulf ports, c.i.f. ton.157.50 - —
Pacific ports, c.i.f. ton.152.50 - —
Coriander seed, Moroccan, bgs. lb. .11¼- —
Roumanian, bgs. lb. .08 - —
Yugoslavian, bgs. lb. .08½- —


m-Chloroaniline*
A water-white to light-amber liquid that tends to darken on storage. It is available in a stabilized form to retard color development. #The sum of the ortho and para isomers is under 2%.
m-Chloroaniline S Technical
NH2
Cl
SPECIFICATIONS:
Purity: 98.0% minimum
Freezing Point:— 11°C. minimum
Moisture Content: 0.5% maximum
Molecular Weight: 127.6
o-Chloroaniline*
A water-white solid which darkens on storage. It may contain up to 3% isomers, chiefly para.
NH2
Cl
SPECIFICATIONS:
Purity: 99.5% minimum, by nitrite absorption
o-Chloroaniline Content: 97% minimum
Moisture Content: 0.2%
p-Chloroaniline*
A water-white to light-amber solid that tends to darken on storage. It is available in a stabilized form to retard color development.# Both forms may contain from 0.5 to 1.0% each of ortho and meta isomers and traces of aniline. p-Chloroaniline is soluble in alcohol and acetone, very slightly soluble in water.
p-Chloroaniline S Technical
NH2
Cl
SPECIFICATIONS:
Purity: 97.5% minimum
Moisture Content: 0.15% maximum
2,5-Dichloroaniline*
A white to dull-red-brown solid. Soluble in organic solvents and dilute hydrochloric acid. Slightly soluble in water. It may contain up to 1.0% m-chloroaniline and traces of 2,5-dichloro-nitrobenzene as impurities.
NH2
Cl
Cl
SPECIFICATIONS:
Purity: 99.0% minimum, by nitrite absorption.
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*Sold in technical grades
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BETTER THINGS FOR BETTER LIVING ...THROUGH CHEMISTRY
ORGANIC CHEMICALS DEPARTMENT

Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.11 - —
l.c.l. 100 lbs. 7.26 - —
Syrup, 42°, dms., c.l. 100 lbs. 7.08 - —
l.c.l. 100 lbs. 7.23 - —
Corrosive sublimate (see Mercuric Chloride)
Cortisone acetate, NNR, bulk gram 3.50 3.53
Cottonseed meal, 41%, bgs., Memphis ton 52.50 - —
Coumarin, NF, cryst., dms. lb. 3.20 - 3.45
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, cbys. lb. 3.05 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 —
soln., 80%, tanks, works gal. .2068 —
refd., dms., c.l., works gal. .40 - .42
l.c.l., same basis gal. .50 - .53
tanks, same basis gal. .30 - .33
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, tanks, works lb. .528 - —
Cresol, tech., 50% below 204°C., dry above 207 C., wide distillation range, non-ret. dms., c.l., frt equald lb. .148 - —
l.c.l., same basis lb. .151 - —
tanks, same basis lb. .135 - —
USP, non-ret., dms., c.l., same basis lb. .158 - —
l.c.l., same basis lb. .161 - —
ret. dms., c.l. same basis lb. .140 - —
l.c.l., same basis lb. .145 - —
tanks same basis lb. .145 - —
m-Cresol, 95-98% dms., c.l., works, lb. .60 - —
l.c.l. works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .158 - —
l.c.l., same basis lb. .161 - —
tanks, same basis lb. .145 - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .198 - —
l.c.l., same basis lb. .201 - —
tanks, same basis lb. .185 - —
o-Cresol, m.p. over 30°C., ret. dms., c.l., frt. equald lb. .173 - —
l.c.l., same basis lb. .176 - —
tanks, same basis lb. .16 - —
29°C., ret. dms., c.l., frt. equald. lb. .16 - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .15 - —
25-29°C., dms., c.l., frt. equald. lb. .153 - —
l.c.l. same basis lb. .156 - —
tanks, same basis lb. .14 - —
p-Cresol, 98%, dms., c.l., dlvd. lb. .50 - —
l.c.l., dlvd lb. .51 - —
tanks, dlvd lb. .49 - —
Methyl ether, cns lb. 1.90 - 2.50
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼ - .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Insecticide, dealers, bgs., c.l., dlvd 100 lbs. 16.75 - —
l.c.l., dlvd 100 lbs. 17.75 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .26 - .27
l.c.l., works lb. .27 - .27½
Cubeb berries, XX, NF bgs. lb. .60 - .65
powd., cs lb. .75 - .80
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tarks, works lb. .11 - —
Cumin seed, Iranian, bgs lb. .12 - —
Turkish, bgs lb. .12½ - —
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. 08½ - —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 - —
pulv., 21% N, bgs., works, unit-ton 2.75 - —
indust. grade, bgs., c.l., works ton 75.00 - —
l.c.l., bgs., works ton 96.00 - —
6-16 mesh, dms., c.l., works ton 120.00 - —
l.c.l., works ton 140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½ - .37¾
l.c.l., works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —
Cyclohexylamine, dms., c.l., works, lb. .46½ - —
l.c.l., works lb. .47½ - —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

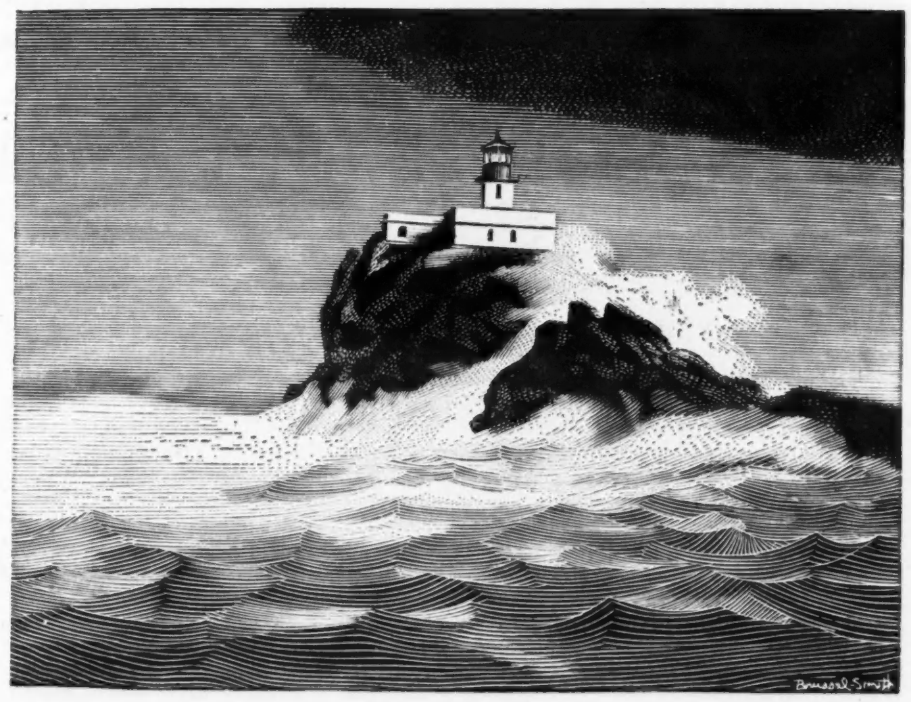
D

2-4-D, tech., dms., c.l., works, frt. equald lb. .41½ —
l.c.l., same basis lb. .46½ - .48½
Butyl ester, dms., c.l., works, lb. .43 - —
l.c.l., same basis lb. .48 - .50
Isopropyl ester, dms., c.l., works, lb. .43 - —
l.c.l., works lb. .48 - .50
Dandelion root, bls lb. .35 - .40
DDD, tech., flake, grd., fib. bgs., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib. dms., c.l., same basis lb. .28 - —
smaller lots same basis lb. .30 - —
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. .38½ - —
Deertongue, leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton 53.40 - —
14½% P, paper bgs., c.l., t.l., works ton 48.00 - —
17%P paper bgs., c.l., t.l., works ton 56.00 - —
18% P, paper bgs., c.l., t.l., works ton 69.85 - —
Degras, common, bbls lb. .11 - .12
neutral, less 2% f.f.a., bbls lb. .21 - .22
over 2% f.f.a., bbls lb. .20 - .21
d-Desoxyephedrine hydrochloride bots lb. 25.00 - —
dl. bots. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.15 - —
l.c.l. 100 lbs. 9.30 - —
canary, paper bgs., c.l. 100 lbs. 8.89 - —
l.c.l. 100 lbs. 9.04 - —
dark, paper bgs., c.l. 100 lbs. 8.99 - —
l.c.l. 100 lbs. 9.14 - —
white, paper bgs., c.l. 100 lbs. 8.73 - —
l.c.l. 100 lbs. 8.88 - —
Corn dextrin in cotton bgs. 25c. per 100 lbs higher.
Potato, imported, bgs lb. .10½ - .11
Dextrose, USP, dms lb. .17¾ —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.50 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .30¾ - —
l.c.l., works lb. .32¼ - —
tanks, works lb. .28¾ - —

Di-tert-amyl phenol, dms., c.l., works lb. .30¾ - —
l.c.l., works lb. .32¼ - —
tanks, works lb. .28¾ - —
o-Dianisidine, fib. dms lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works, lb. .89¾ - .90
l.c.l., same basis lb. .90¼ - .91
tanks, same basis lb. .88 - —
p-Dibromobenzene, bgs., 500-lb. lots lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd., E lb. .32 - —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
l.c.l., works lb. .66½ - .67
tanks, works, dlvd lb. .64 - .64½
Tartrate, dms., works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Di-tert-butyl-p-cresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Dicapryl phthalate, dms., c.l., dlvd., lb. .30½ - .31½
l.c.l., dlvd lb. .31½ - .32½
tanks, dlvd lb. .29½ - —
Sebacate, dms., c.l., works lb. .63 - —
l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼ - —
l.c.l., same basis lb. .13¼ - —
tanks, same basis lb. .10¾ - —
p-Dichlorobenzene, dms., c.l., frt. alld. E lb. .14½ - —
l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ - —
l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).

Dichloropentanes, dist., dms., c.l., works lb. .03 - —
l.c.l., works lb. .03¾ - —
tanks, works lb. .04¼ - —
Dicyclohexylamine, dms., c.l., works, lb. .51 - —
l.c.l., works lb. .51¾ - —
tanks, works lb. .49¾ - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld. lb. .58¼ - .59
l.c.l., same basis lb. .59¼ - .60
Dieldrin, dms., frt. alld lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E lb. .26½ - —
l.c.l., same basis lb. .27½ - —
tanks, same basis lb. .24½ - —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69 - —
l.c.l., dlvd lb. .70 - —
tanks, dlvd lb. .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l. dlvd. lb. .28 - —
tanks, dlvd. lb. .25 - —
Sulfate, dms., c.l., works lb. .18¾ - —
l.c.l. works lb. .19¼ - —
tanks works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .50½ - —
l.c.l., same basis lb. .51½ - —
tanks same basis lb. .48½ - —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .51 - —
l.c.l. same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).

Diethylene glycol, dms., c.l., dlvd. E lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
tanks, same basis lb. .15¼ - —
Boriborate, dms., l.c.l. lb. .31 - —
Diethyl ether, dms., works lb. .47½ - —
l.c.l., works lb. .48 - —
Monobutyl ether, dms., c.l., dlvd. E lb. .30¼ - —
l.c.l., dlvd. E lb. .31¼ - —
tanks, dlvd. E lb. .29¼ - —
Acetate, dms., c.l., works lb. .30 - —
l.c.l., works lb. .30½ - —
tanks, dlvd. E lb. .28¼ - —
Monoethyl ether, dms., c.l., dlvd. lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. .20 - —
Acetate, dms., c.l., works lb. .26¾ - —
l.c.l., works lb. .27¼ - —
tanks, dlvd. E lb. .25¼ - —
Monomethyl ether, dms., c.l., dlvd lb. .20½ - —
l.c.l., dlvd lb. .21½ - —
tanks, dlvd lb. .18½ - —
Diethylenetriamine, dms., c.l., dlvd. E lb. .42½ - —
l.c.l., dlvd. E lb. .44½ - —
tanks, dlvd. E lb. .41½ - —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo 100.00 - —
1-kilo lot kilo 110.00 - —
Digitalis leaves, USP, dom., dms., lb. .90 - 1.10
Digitoxin, USP, bots gram 5.00 - 5.50
Diglycol laurate, dms lb. .35 - .38
Stearate, dms., ton lots lb. .25 - —
Dihexyl sebacate, dms., c.l., works, lb. .64 —
l.c.l., works lb. .64½ - .65
tanks, works lb. .62 —



FAMOUS LIGHTHOUSES OF AMERICA

TILLAMOOK ROCK LIGHTHOUSE is one of the most unusual on the Pacific Coast. Built in 1881, it is a stone structure standing on a small rock islet one mile off shore at Tillamook Head, Oregon. Because of its exposed position, in deep water and open to the sweep of the Pacific, it has received many violent batterings from stormy seas. Occasionally waves break completely over the lantern itself, 133 feet above sea level. Landing is made only by hoisting from a boat.

Freedom From Risk in the choice of electrochemicals is provided by Niagara Alkali Company's modern production facilities and by its extremely rigid quality control methods. Rely on Nialk® Liquid Chlorine, Nialk Caustic Potash, Nialk Carbonate of Potash, Nialk Paradichlorobenzene, Nialk Caustic Soda, Nialk TRICHLORethylene, Niagathal® (Tetrachloro Phthalic Anhydride).

NIAGARA ALKALI COMPANY

60 East 42nd Street

New York 17, N.Y.

Dihydrazine Sulfate—Dyes, Coaltar

Dihydrazine sulfate, dms., works	lb.	1.10	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.063	.07
Sulphate, bulk	gram.	.063	.07
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms.	lb.	2.55	—
tech., dms	lb.	1.09	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.15½	—
l.c.l., dlvd	lb.	.16½	—
tanks, same basis	lb.	.13½	—
Phthalate, dms., c.l., dlvd. E	lb.	.31	—
l.c.l. same basis	lb.	.32	—
tanks, same basis	lb.	.29	—
Di-isobutylene, dms., c.l., dlvd. E	lb.	.10	—
l.c.l., dlvd. E	lb.	.11	—
tanks, dlvd E	lb.	.08	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.32½	—
l.c.l., same basis	lb.	.33½	—
tanks, same basis	lb.	.30½	—
Di-iso-octyl sebacate, dms., c.l., works	lb.	.63	—
l.c.l., works	lb.	.63½	.64
tanks, works	lb.	.61	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.22¾	—
l.c.l., same basis	lb.	.23¼	—
tanks, same basis	lb.	.20¾	—
Di-isopropylamine, dms., c.l., dvd. E. of Rockies	lb.	.50	—
l.c.l., same basis	lb.	.51	—
tanks, same basis	lb.	.48	—
Dilliseed, dewhiskered, bgs.	lb.	.09½	—
nat., bgs.	lb.	.09	—
Dimethyl anthranilate, cns.	lb.	5.25	5.75
Chloroacetal, dms., c.l., works	lb.	.45	—
l.c.l., works	lb.	.50	—
tanks, works	lb.	.40	—
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd.	lb.	1.43	—
l.c.l., dlvd	lb.	1.45	—
tanks, dlvd	lb.	1.40	—
70%, dms., c.l., dlvd., 100% basis	lb.	1.02	—
l.c.l., dlvd., 100% basis	lb.	1.03	—
tanks, dlvd., 100% basis	lb.	1.00	—
Hydroquinone, dms.	lb.	1.70	2.75
Phthalate, dms., c.l., works	lb.	.29½	—
l.c.l., works	lb.	.30½	—
tanks, dlvd.	lb.	.27½	—
Sebacate, dms., c.l., works	lb.	1.27	—
l.c.l., works	lb.	1.28	—
tanks, works	lb.	1.25	—
Sulfate, 55-gal., ret. dms., c.l. works	lb.	.15	—
l.c.l. works	lb	.16	—
10-gal. ret. dms., l.c.l., works.	lb.	.16½	—
Dimethylamine, 25% soln., dms., c.l., frt equald	lb.	.42	—
l.c.l., frt. equald	lb.	.42½	—
tanks, frt. equald	lb.	.33	—
40% soln., dms., c.l., frt. equald	lb.	.39	—
l.c.l., frt. equald	lb.	.39½	—
tanks, frt. equald	lb.	.33	—
N,N-Dimethylaniline, dms., c.l., frt, alld	lb.	.29½	—
l.c.l., frt. alld	lb.	.30½	—
tanks, frt. alld	lb.	.28½	—
N,N-Dimethylformamide dms., works.	lb.	.34	.39
tanks, works	lb.	[illegible]	—
2,4-Dinitroaniline, dms., frt. equald	lb.	.57	—
m-Dinitrobenzene, 85°C., dms	lb.	.22	—
89°C., dms.	lb.	.24	—
2,4-Dinitrochlorobenzene, dms., c.l., frt. alld. E	lb.	.15¼	—
l.c.l., frt. alld. E	lb.	.15¾	—
tanks, frt. alld., E	lb.	.15	—
2,4-Dinitrophenol, bbls.	lb.	.37	—
2,4-Dinitrotoluene, oily, dms.	lb.	.10	—
refd., 63 C., dms	lb.	.21	—
Dioctyl adipate, dms., c.l., works.	lb.	.44½	—
l.c.l., works	lb.	.45½	—
tanks, works	lb.	.42½	—
Phthalate, dms., c.l., frt. alld	lb.	.32½	—
l.c.l., frt. alld	lb.	.33½	—
tanks, frt. alld	lb.	.30½	—
Sebacate, dms., c.l., works.	lb.	.60	—
l.c.l., works	lb.	.60½	.61
tanks, works, dlvd	lb.	.58	.58½
Di-o-tolyguanidine, dms., ton lots, dlvd	lb.	.60	—
smaller lots, dlvd	lb.	.61	—
1,4-Dioxane, dms., c.l., works	lb.	.28¾	—
l.c.l. same basis	lb.	.29¼	—
tanks, same basis	lb.	.27	—
Dip oil (see Tar acid oil).			
Dipentaerythritol, bgs., l.c.l., works.	lb.	.35	—
Dipentene, dest-dist., dms., c.l., works	gal.	.47	—
l.c.l., works	gal.	.52	—
ex-whse	gal.	.64	—
steam-dist., dms., c.l., works, South.	gal.	.59	—
dlvd. N. Y	gal.	.67	—
tanks, works, South	gal.	.45	—
lots	lb.	.50	—
Diphenyl, bbls., c.l., works	lb.	.15	—
l.c.l., works	lb.	.16	—
Diphenyl in bags ¼c. lower.			
Oxide, perfume grade, cns.	lb.	.54	.61
Phthalate, dms., c.l., works	lb.	.51¾	—
l.c.l., works	lb.	.53¾	—
Diphenylguanidine, bgs., dms., ton lots	lb.	.51	.52
smaller lots	lb.	.52	—
Diphenylhydantoin-sodium USP, dms	lb.	5.30	5.60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17¼	—
l.c.l., same basis	lb.	.18¼	—
tanks, same basis	lb.	.15¼	—
Monomethyl ether, dms., c.l., dlvd. E	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.18½	—
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock	ton	70.00	72.00
Divinylbenzene 20-25% dms., c.l., works	lb.	.20	—
l.c.l., works	lb.	.21	—
tanks, works	lb.	.19	—
40-50%, dms., c.l., works, 100% basis	lb.	1.00	—
l.c.l., works, 100% basis	lb.	1.15	—
Dodecylbenzene, dms., c.l., frt. equald	lb.	.14	—
l.c.l., same basis	lb.	.15	—
tanks, same basis	lb.	.12	—

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—

Blue, FD & C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60
Green, FD & C, No. 1	lb.	15.65	17.60
No. 2	lb.	19.60	22.85
No. 3	lb.	[illegible].30	35.90
Red, FD & C, No. 1, cns	lb.	5.90	7.85
No. 2	lb.	3.30	4.10
No. 3	lb.	19.60	22.85
No. 4	lb.	5.55	7.50
Violet, FD & C, No. 1, cns	lb.	15.65	17.60
Yellow, FD & C, No. 1, cns	lb.	9.15	11.05
No. 5	lb.	3.30	4.10
No. 6	lb.	3.30	4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Black, D&C, No. 1	lb.	10.50	10.95
Brown, D&C, No. 1	lb.	15.65	16.10
Green, D&C, No. 5	lb.	15.65	16.10
No. 6	lb.	15.65	16.10
No. 7	lb.	14.35	14.80
Orange, D&C, No. 3	lb.	10.50	10.95
No. 4	lb.	19.60	20.05
No. 5	lb.	5.23	5.70
No. 17	lb.	10.50	10.95
No. 18	lb.	23.55	24.00
No. 19	lb.	15.00	15.45
No. 21	lb.	3.10	3.60
No. 22	lb.	10.50	10.95
No. 28	lb.	24.20	24.65
No. 33	lb.	17.00	17.45
Violet,, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No. 8	lb.	10.50	10.95
No. 10	lb.	13.05	13.50
No. 11	lb.	13.05	13.50

Dyes, coaltar, certified, colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—

Blue, Ext., D&C, No. 1, cns	lb.	15.65	16.10
Green, Ext., D&C, No. 1, cns	lb.	15.65	16.10
Red, Ext., D&C, No. 1, cns	lb.	13.05	13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	10.95

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

20 Chrysoidine Y, dustless	lb.	.89	—
27 Fast light, orange 2G	lb.	1.09	—
31 Phloxine 2G	lb.	.89	—
36 Yellow 2G	lb.	1.00	—
40 Orange II extra, conc	lb.	1.29	—
57 Fuchsine 6B	lb.	1.31	—
79 Scarlet 2R	lb.	.98	—
151 Orange AD	lb.	.67	—
161 Orange RR	lb.	.80	—
176 Fast red A	lb.	1.18	—
179 Rubine XX, conc	lb.	1.25	—
180 Blue F4B	lb.	1.11	—
185 Brilliant scarlet 3RU, conc.	lb.	1.03	—
202 Chrome blue black R, conc.	lb.	.91	—
203 Chrome black T	lb.	.95	—
208 Fast blue SR	lb.	1.10	—
216 Chrome red B	lb.	.92	—
234 Brown Y	lb.	1.08	—
246 Blue black, extra, conc	lb.	1.16	—
275 Milling red 3R, conc	lb.	1.62	—
289 Navy blue 3R, conc	lb.	1.44	—
299 Black F, conc	lb.	1.86	—
304 Neutral black 2B, conc.	lb.	2.43	—
326 Fast scarlet 4BNC	lb.	1.80	—
332 Bismark brown RX, conc., dustless	lb.	1.16	—
365 Brilliant yellow, conc	lb.	3.11	—
382 Scarlet B	lb.	2.20	—
401 Diazo black BHD	lb.	.79	—
406 Blue 2B, extra conc	lb.	1.30	—
419 Red FC	lb.	1.23	—
420 Brown M	lb.	1.19	—
448 Red 4BX, conc	lb.	1.43	—
518 Diamine sky blue FF, extra, conc	lb.	1.65	—
561 Brown B	lb.	2.45	—
581 Black EB, 200%	lb.	1.13	—
593 Green BY, conc	lb.	.87	—
596 Yellow Brown R, extra	lb.	1.08	—
620 Yellow 2G	lb.	1.11	—
639 Fast Yellow GG	lb.	1.97	—
640 Yellow XX	lb.	1.95	—
655 Yellow OX	lb.	2.24	—
657 Green V	lb.	2.31	—
662 Brilliant green G	lb.	3.07	—
667 Milling green 6B, conc	lb.	4.05	—
671 Blue EG	lb.	1.68	—
681 Crystal violet powder	lb.	2.15	—
698 Violet 6BN Powder	lb.	1.93	—
720 Brilliant blue BBG	lb.	2.07	—
729 Blue B, conc	lb.	3.06	—
749 Red BX	lb.	4.76	—
814 Yellow NN, conc	lb.	3.11	—
841 Safranine GF, extra, conc.	lb.	3.48	—
865 Nigrosine J	lb.	.87	—
922 Blue GXX	lb.	1.88	—
978 Black GXCF, conc	lb.	.32	—
1034 Alizarine red SC	lb.	2.85	—
1054 Alizarine blue SAPX	lb.	3.20	—
1078 Alizarine green CG, extra.	lb.	2.99	—
1085 Alizarine blue black B	lb.	2.56	—
1096 Golden orange GFD, single paste	lb.	2.19	—
1099 Dark blue BO, single paste.	lb.	1.93	—
1101 Jade green N, double paste.	lb.	1.10	—
1106 Blue RS, double paste	lb.	3.26	—
1217 Orange RD, double powder.	lb.	3.94	—
1113 Blue BLFD, double paste	lb.	2.48	—
1150 Olive R, single paste	lb.	1.21	—
1151 Brown R, single paste	lb.	1.94	—
1171 Indigo synthetic, 20% paste.	lb.	.31	—
p-4 Brown PG	lb.	2.54	—
p-14 Brown EB	lb.	1.83	—
p-24 Gray L	lb.	1.76	—
p-80 Diazo brilliant scarlet ROAD	lb.	3.07	—
p-202 Diazo black VJ, conc	lb.	2.10	—
p-244 Brilliant scarlet BN	lb.	1.44	—
p-313 Naphthol SWF	lb.	2.03	—

Dyes, coaltar, oil soluble, 100 lb. dms., dlvd.

860 Induline base ZM	lb.	1.07	—
Z2R	lb.	1.07	—
Oil black ZBC	lb.	4.46	—
ZBD	lb.	3.03	—
ZHH	lb.	4.61	—
ZMM	lb.	6.52	—

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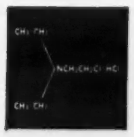
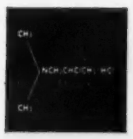
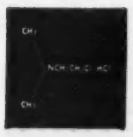
for pharmaceutical synthesis



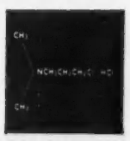
beta-Diethylaminoethyl Chloride Hydrochloride. (DEC). $(CH_3CH_2)_2\ NCH_2CH_2C1.\ HC1$. A granular solid. Specially suited for use as an intermediate in organic chemical manufacture, including the production of antispasmodic agents and other pharmaceuticals.



beta-Dimethylaminoisopropyl Chloride Hydrochloride. $(CH_3)_2\ NCH_2CHC1CH_3.\ HC1$. (DMIC). An organic intermediate similar in appearance and properties to DEC and DMC. Specially prepared for manufacture of analgesics and other pharmaceuticals. Other potential uses in organic synthesis.



beta-Dimethylaminoethyl Chloride Hydrochloride. (DMC). $(CH_3)_2\ NCH_2CH_2C1.\ HC1$. A granular solid. Specially prepared for use in manufacture of antihistaminics and other pharmaceuticals. Other potential uses in organic synthesis. Relatively non-toxic in hydrochloride form.



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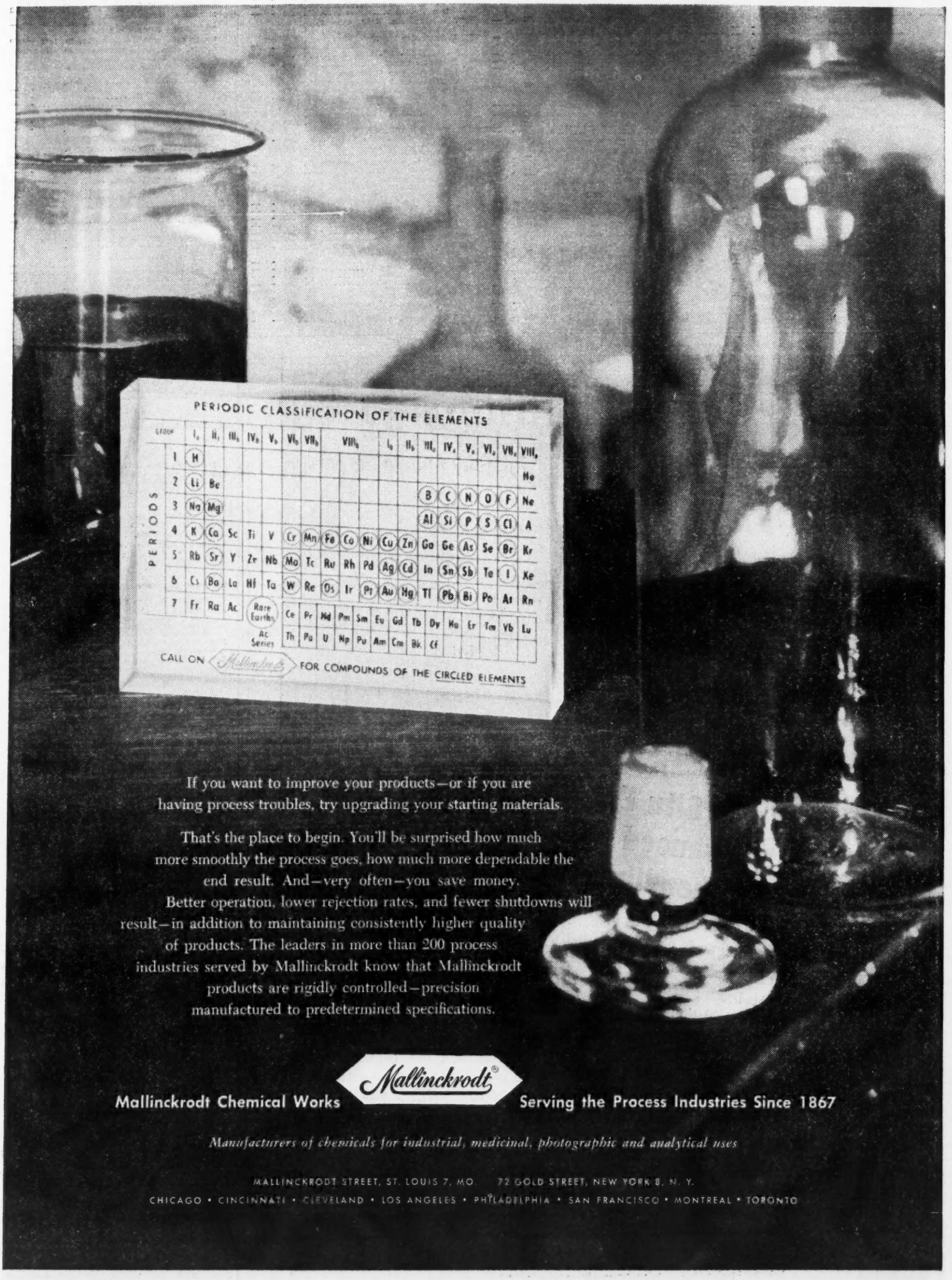
PERIODIC CLASSIFICATION OF THE ELEMENTS
GROUP I, II, III, IV, V, VI, VII, VIII, I, II, III, IV, V, VI, VII, VIII
PERIODS
1 H He
2 Li Be B C N O F Ne
3 Na Mg Al Si P S Cl A
4 K Ca Sc Ti V Cr Mn Fe Co Ni Cu Zn Ga Ge As Se Br Kr
5 Rb Sr Y Zr Nb Mo Tc Ru Rh Pd Ag Cd In Sn Sb Te I Xe
6 Cs Ba La Hf Ta W Re Os Ir Pt Au Hg Tl Pb Bi Po At Rn
7 Fr Ra Ac
Rare Earths
Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb Lu
Ac Series
Th Pa U Np Pu Am Cm Bk Cf
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Dyes, Coaltar—Fuller's Earth

Dyes, coaltar, oil soluble, 100-lb. dms., dlvd
- Oil, blue ZN ..... lb. 8.02 - —
- ZV ..... lb. 4.95 - —
- 1078 Alizarine Cyanine Green base Z ..... lb. 6.13 - —
- Oil, orange ZMG ..... lb. 1.32 - —
- Oil, red Z-1700 ..... lb. 1.49 - —
- Oil, Scarlet ZLB ..... lb. 1.44 - —
- 1080 Oil, violet Z ..... lb. 6.81 - —
- 1073 Oil, violet ZIRS ..... lb. 6.13 - —
- Oil, Yellow ZG ..... lb. 6.33 - —
- 800 Chinoline yellow ZSS ..... lb. 2.67 - —

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd.
- Black ZRB ..... lb. 2.95 - —
- Brown ZG ..... lb. 5.30 - —
- Orange ZR ..... lb. 5.87 - —
- Red ZB ..... lb. 6.41 - —
- Yellow ZR ..... lb. 4.62 - —

E

Echinacea root, bls ..... lb 1.10 - —
Egg albumin (see Albumin).
- Yolk, dried, dom., bbls ..... lb. 1.05 - 1.08
- tanners bbls. ..... lb .06 - .06½

Elm bark, grinding, bls ..... lb. .30 - .32
- powd., bbls., bxs ..... lb. .45 - —
- select, bundles ..... lb. .75 - —

Emetine hydrochloride, USP, bots ..... oz.42.50 -44.00
Endrin, tech., dms., dlvd., 100% basis lb. 3.75 - —
Ephedrine, syn., USP, anhyd., bots., 100-oz. lots oz. .98 - 1.00
- hydrous, bots., 100-oz. lots oz. .92 - —
- hydrochloride, tins, 100-oz. lots .. oz. .75 - —
- Sulfate, cryst., tins, 100-oz. lots. oz. .72 - —
- powd., tins, 100-oz. lots ... oz. .73 - —

Epichlorohydrin, dms., c.l., dlvd. lb. .35 - —
- l.c.l., dlvd. ..... lb. .36 - —
- tanks, dlvd. ..... lb. .33 - —

Epinephrine, syn., USP, bots., 100-gram lots gram. .45 - .55
Epsom salt (see Magnesium sulfate).
Ergosterol, unirradiated, cryst. kilo.150.00 - —
Ergot, NF, dms., tin-lined ..... lb. 3.00 - —
Eserine salicylate, bots ..... oz.84.00 - —
- Sulfate, bots ..... oz.84.00 - —

Ether (see specific product).
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld. lb. .13 - —
- l.c.l., frt. alld. ..... lb. .14 - —
- tanks, frt. alld. ..... lb. .11 - —
- 95-98%, dms., c.l., frt. alld. lb. .13¼ - —
- l.c.l., frt. alld. ..... lb. .14¼ - —
- tanks, frt. alld. ..... lb. .11¼ - —
- 99%, dms., c.l., frt. alld lb. .13½ - —
- l.c.l., frt. alld. ..... lb. .14½ - —
- tanks, frt. alld. ..... lb. .11½ - —
- syn., 85-88%, dms., c.l., dlvd. lb. .13 - —
- l.c.l., dlvd. ..... lb. .14 - —
- tanks, dlvd. ..... lb. .11 - —
- 95-98%, dms., c.l., dlvd. lb. .13¼ - —
- l.c.l., dlvd. ..... lb. .14¼ - —
- tanks, dlvd. ..... lb. .11¼ - —
- 99%, dms., c.l., dlvd. lb. .13½ - —
- l.c.l., dlvd. ..... lb. .14½ - —
- tanks, dlvd. ..... lb. .11½ - —

Acetoacetate, dms., c.l., dlvd. lb. .58 - —
- l.c.l., dlvd. ..... lb. .59 - —
- tanks, dlvd. ..... lb. .56 - —

Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 - —
- l.t.l., dlvd. ..... lb. .37 - —
- tanks, dlvd. ..... lb. .34 - —

Aminobenzoate, USP (see Benzocaine).
Bromide, tech., 98%, dms., c.l., frt. alld. E. lb. .41 - .43
- l.c.l., frt. alld. E ..... lb. .43 - .45

Butyrate, works ..... lb .80 - 1.02
Carbamate (see Urethane).
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 - —
- smaller lots, works ... lb. .72 - .80
- vis., 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 - .70
- smaller lots, works lb .67 - .81

Chloride, tech., cyl., works ..... .20 - .22
- dms., works ..... lb. .18 - .20
- tanks, works ..... lb. .10 - —

Butyl ketone, dms., c.l., works lb. .35½ - —
- l.c.l., works ..... lb. .36 - —
- tanks, works ..... lb. .34 - —

Cinnamate, ens ..... lb. 2.71 - 3.45
Ethanolamines, industrial, dms., c.l., dlvd. E Miss lb. .12 - —
- l.c.l., same basis ..... lb. .13 - —
- tanks, same basis ..... lb. .10 - —

mixed, dms., c.l., dlvd. E ..... lb. .42½ - —
- l.c.l., dlvd. E ..... lb. .43½ - —
- tanks, dlvd. E ..... lb. .40½ - —

Ether, absolute, ACS, dms ... lb. .27 - —
- anesthesia, USP, hospitals, 1-lb. cns. lb. 1.01 - —
- ½-lb. cns ..... lb. 1.11 - —
- ¼-lb. cns ..... lb. 1.21 - —

indust., c.l., dlvd. ..... lb. .12 - —
- l.c.l., dlvd. E. ..... lb. .13 - —
- tanks, dlvd. E. ..... lb. .10 - —

Gallate, dms., 100 to 2,000-lb. lots. lb. 3.90 - 4.40
Iodide, cbys., works ..... lb. 3.30 - —

Ethyl methacrylate, dms., c.l., and less than truckload, works, frt. equald. lb. .51½ - .52
Morphine hydrochloride, USP, bots. oz.11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. ..... lb. 1.00 - 1.50
Oleate, dms., l.c.l., works ..... lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethylorthosilicate).
- 40% available SiO_2, dms., c.l., dlvd. lb. .49 - —
- l.c.l., dlvd. ..... lb. .50 - —
- tanks, dlvd. ..... lb. .47 - —

N-Ethyl-a-naphthylamine, dms., works, lb. 1.02 - —
N-Ethyl-o-toluidine, bbls ..... lb. .88 - —
Ethylamine (see Mono. Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .51 - —
- l.c.l., frt. alld. ..... lb. .52 - —
- tanks, frt. alld. ..... lb. .50 - —

Ethylbenzene, 99%, dms., c.l. ... lb. .19½ - .20¼
- l.c.l. ..... lb. .20½ - .21¼
- tanks ..... lb. .18½ - —

Ethylene dichloride, dms., c.l., dlvd. lb. .10¼ - —
- l.c.l., same basis ..... lb. .12¼ - —
- tanks, same basis ..... lb. .09 - —
- Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.

Glycol, indust., dms., c.l., dlvd. E. lb. .15½ - —
- l.c.l., same basis ..... lb. .16½ - —
- tanks, same basis ..... lb. .13½ - —

Monobutyl ether, dms., c.l., dlvd. E ... lb. .21½ - —
- l.c.l., dlvd. E ..... lb. .22½ - —
- tanks, dlvd. E ..... lb. .19½ - —

Monoethyl ether, dms., c.l., dlvd. E. lb. .20½ - —
- l.c.l., dlvd. E ..... lb. .21½ - —
- tanks, dlvd. E ..... lb. .18½ - —

Acetate, dms., c.l., dlvd. E lb. .18½ - —
- l.c.l., dlvd. E ..... lb. .19½ - —
- tanks, dlvd. E ..... lb. .16½ - —

Monomethyl ether, dms., c.l., dlvd. E. lb. .20½ - —
- l.c.l., dlvd. E ..... lb. .21½ - —
- tanks, dlvd. E ..... lb. .18½ - —

Acetate, dms., c.l., dlvd. E lb. .28¾ - —
- l.c.l., dlvd. E ..... lb. .29¼ - —
- tanks, dlvd. E ..... lb. .27 - —

Monostearate, triple pressed, dms lb. .34 - —
Oxide, dms., c.l., dlvd. E ..... lb. .21½ - —
- l.c.l., dlvd. E ..... lb. .24½ - —
- tanks, dlvd. E ..... lb. .15½ - —

Trichloride (see Trichloroethane).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .46 - —
- l.c.l., dlvd. E., 100% basis lb. .47 - —
- tanks, dlvd. E., 100% basis lb. .44 - —

Ethylvanillin, cns., 25-lb. lots ... lb. 6.75 - 7.30
- smaller lots ..... lb. 7.35 - 7.40

Eucalyptol, USP, cns., dms. ..... lb. 1.40 - 1.50
Eugenol, USP, bots. ..... lb. 2.20 - 3.25
Euphorbia herb, bls ..... lb. .15 - .17

F

Feldspar, 140-200 mesh, bulk, c.l., works ton.16.50 - —
- Feldspar in bags $3 per ton higher.

Fennel seed, Argentine, bgs ..... lb. .17 - —
- Czech, medium, bgs ..... lb. .09½ - —
- Indian, light, bgs ..... lb. .12 - .12½
- Roumanian, bgs. ..... lb. .09½ - —

Fenugreek seed, Indian, bgs ..... lb. .08½ - .09
- Moroccan, bgs. ..... lb. .08½ - .09

Ferric acetate, liquor, 25°, bbls., c.l., works lb. .09 - —
- l.c.l., works ..... lb. .09¾ - —
- soln., USP IX, cbys ..... lb. .16 - —
- djns. ..... lb. .17 - —

Cacodylate, NF, bots ..... lb.13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
- l.c.l., works ..... 100 lbs. 7.85 - —
- indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
- l.c.l., works ..... 100 lbs. 5.75 - 7.25
- 42° Be, photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
- sewage grade, tanks, frt. equald, 100% basis. 100 lbs. 3.50 - —

USP, cryst., dms., works ... lb. .07¼ - .09
Citrate, gran., dms. ..... lb. .86 - —
Hydrophosphite, NF, dms. ... lb. 3.45 - —
Naphthenate, liq., 6% Fe., dms., frt. alld. lb. .25¾ - —
Oxalate, gran., dms. ... lb. .85 - .87
Phosphate, NF, soluble, gran., pearls, cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, gran., pearls, dms lb. .78 - .81
Resinate, 6¾% Fe, dms., frt. alld. lb. .29½ - —
Stearate, dms., c.l., frt. alld. lb. .37 - —
- l.c.l., frt. alld ... lb. .38 - .42

Sulfate, partially hydrated, bgs., c.l., works ton.31.75 -32.75
- l.c.l., works ..... ton.34.75 -40.75
- lb. .27 - —

Ferric-ammonium citrate, brown, NF, gran., dms lb. .56 - .59
- green, USP XII, gran., dms lb. .56 - .59
- Oxalate, fine gran., dms ... lb. .25½ - .28¼

Ferric-potassium, oxalate, fine gran., dms lb. .30½ - .33⅛
Ferric-sodium oxalate, fine gran., dms lb. .25½ - .28⅛
Ferrous gluconate, NF, dms lb. .88 - —
Sulfate, gran., bgs., c.l., works. ton.34.50 - —
- l.c.l., dlvd. Metropolitan area 100 lbs 3.35 - 4.25
- bbls, c.l., works ..... ton.40.00 - —
- bulk, c.l., works ..... ton.27.00 - —
- USP cryst., bbls., dms ... lb 09¼ - .10

Fir, balsam, Canada, ens ..... gal.32.00 - —
- Oregon, bbls. ..... gal. 4.00 - —

Fishliver oil (see Oil fishliver).
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ..ton.155.00 - —
Fishscrap, menhaden, dried, 60% protein, bgs., Balto area ..ton.151.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, NF, 37%, (inhibited), methanol, Zone 1, dms., c.l., dlvd. lb. .0675- —
- l.c.l., works ..... lb. .072 - .0725
- tanks, dlvd ..... lb. .04 - —
- Zone 2, 12-15% methanol, dms., c.l., dlvd lb. .071 - —
- tanks, dlvd ..... lb. .043 - —

Methanol-free (uninhibited), Zone 1, tanks, dlvd ..... lb. .0375- —
- Zone 2, tanks, dlvd ..... lb. .04 - —

Fringetree bark, bls lb. .60 - .61
Fullers' earth, bgs., c.l., Ill. mines, ton.19.00 - —
- powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton.17.50 - —
- calcined, bgs., c.l., same basis ton.20.00 -21.75
- Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton.16.50 -17.00
- 200-mesh, bgs., c.l., same basis ton 17.50 -18.00
- spent, bgs., c.l., shipt. point ton. 4.50 - 5.00

®BECCO Epoxidation

BECCO's In Situ Epoxidation process* is most advanced and low in cost . . . flexible in handling and results

Makers of pharmaceuticals, plasticizers, insecticides, surface-active materials and others, should become familiar with Becco's newest epoxidation process.

Reactions are highly flexible in terms of time and temperature. A wide range of catalysts may be used, including acids, ion exchange resins, alkane sulfonic acids and others.

Major economies are obvious for several reasons: (1) Yields are high, (2) Capital investment is low, (3) Product recovery is simple, (4) Hydrogen peroxide is used; preformed peracetic acid is not needed, (5) Acetic acid requirements are low, (6) Short reaction times are possible.

Becco technical consultants — in the field or at our modern laboratories in Buffalo — will be glad to discuss the new Becco In Situ Epoxidation process. Write for special bulletins on epoxidation and hydroxylation or for Becco's complete list of bulletins on the use of peroxygen chemicals.

*Patent Pending

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FOOD MACHINERY AND CHEMICAL CORPORATION
STATION E, BUFFALO 7, N.Y.
BUFFALO • BOSTON • CHARLOTTE • CHICAGO
NEW YORK • PHILADELPHIA • VANCOUVER, WASH.

Furan, dms., c.l. or t.l., works..lb. .34½ - —
l.c.l., l.t.l., works..lb. .35 - —
tanks, works..lb .33 - —
Furfural, dms., c.l., works..lb. .13 - —
l.c.l., works..lb. .14 - —
tanks, dlvd. E..lb. .12 - —
dlvd. W..lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd..lb. .22 - —
l.c.l., dlvd..lb. .23 - —
tanks, dlvd..lb. .20 - —
Fustic extract, cryst., No. 1, bbls., l.c.l..lb. .47½ - —
No. 2, bbls., l.c.l..lb. .45½ - —
No. 3, bbls l.c.l..lb. .43½ - —
liq., No. 1, bbls., l.c.l..lb. .22½ - —
No. 2, bbls., l.c.l..lb. .21½ - —
No. 3, bbls., l.c.l..lb. .19 - —
solid, No. 1, bxs., l.c.l..lb. .45 - —

G

G salt, bbls., frt. alld, 100% basis..lb. .73 - —
Gammapicoline (see g-Picoline).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbl., c.l. lb. .53 - —
150 Bloom test, bbl., c.l. lb. .64 - —
200 Bloom test, bbl., c.l. lb. .71 - —
225 Bloom test, bbl., c.l. lb. .74 - —
275 Bloom test, bbl., c.l. lb. .81 - —
Gelsemium root, bls..lb. .23 - .24
Gentian root, bls..lb. .17 - .20
grd., bbls., bxs..lb. .22 - .23
powd. bbls. bxs..lb. .23 - .24
Geraniol, extra, cns., dms..lb. 4.50 - 4.80
standard, cns., dms..lb. 4.20 - —
Geranyl acetate, cns..lb. 3.90 - —
Ginger oleoresin, NF, from African root, bots lb. 4.00 - 7.75
from Jamaican root, bots lb. 6.00 - 10.25
Root, African, bls..lb. .36 - .37
Cochin, bgs..lb. .38 - —
Jamaican, No. 2, bgs..lb. .59 - —
No. 3, bgs..lb. .58 - —
Nigerian, split, bgs..lb. .36 - —
Glauber's salt, anhyd (see Sodium sulfate).
Glue, bone, extracted, 86 jellygrams, bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½ - —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
packers 40 jellygrams, bgs., c.l., dlvd lb. .14 - —
65 jellygrams, same basis lb. .14½ - —
86 jellygrams, same basis lb. .15 - —
115 jellygrams, same basis lb. .15½ - —
155 jellygrams, same basis lb. .18½ - —
164 jellygrams, same basis lb. .19½ - —
renderers' 115 jellygrams, bgs., c.l., dlvd lb. .13 - —
Bone glue, l.c.l., prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121, bgs., c.l., dlvd..lb. .16 - —
122-149, bgs., c.l., dlvd..lb. .18½ - —
150-177, bgs., c.l., dlvd..lb. .21 - —
178-206, bgs., c.l., dlvd..lb. .23½ - —
178-206 bgs., c.l., dlvd..lb. .23½ - —
207-236, bgs., c.l., dlvd..lb. .26 - —
237-266, bgs., c.l., dlvd..lb. .28 - —
267-298, bgs., c.l., dlvd..lb. .30 - —
299-330, bgs., c.l., dlvd..lb. .32 - —
331-362, bgs., c.l., dlvd..lb. .34 - —
363-394, bgs., c.l., dlvd..lb. .36 - —
395-427, bgs., c.l., dlvd..lb. .38 - —
428-460, bgs., c.l., dlvd..lb. .39 - —
461-494, bgs., c.l., dlvd..lb. .40 - —
495-529, bgs., c.l., dlvd..lb. .41 - —
Hide glue l.c.l. prices 1c. higher.
Glycerine, nat., crude, saponification, 88%, to refineries, tanks, lb. .22 Nom.
soaplye, 80%, tanks..lb. .20 Nom.
refd., BP, 98%, dms., c.l., dlvd. lb. .30½ - —
l.c.l., dlvd..lb. .31 - —
tanks, dlvd..lb. .30 - —
dynamite, dms., c.l., dlvd..lb. .30½ - —
l.c.l., dlvd..lb. .31 - —
tanks, dlvd..lb. .30 - —
high gravity, dms., c.l., dlvd..lb. .30½ - —
l.c.l., dlvd..lb. .31 - —
tanks, dlvd..lb. .30 - —
USP, CP, 95% dms., c.l., dlvd. lb. .29½ - —
l.c.l., dlvd..lb. .30 - —
tanks, dlvd..lb. .29 - —
yellow, dist., dms., c.l., dlvd. lb. .30 - —
l.c.l., dlvd..lb. .30½ - —
syn., dms., c.l., dlvd..lb. .30½ - —
l.c.l., dlvd..lb. .31 - —
tanks, dlvd..lb. .30 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works lb. .18½ - —
l.c.l., works..lb. .19 - —
tanks, works..lb. .18 - —
Golden seal root, NF, tested, bls. lb 2.25 - 2.50
powd., bxs..lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline, 85-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice, all hog, tanks, dlvd lb. .09¼ - .09½
not all hog, tanks, dlvd lb. .09 - .09¼
yellow, tanks, dlvd..lb. .07¾ - .07⅞
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb. 5.10 - —
tungstated, PTMA, kgs., works. lb. 6.20 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis..lb. .40 - —
16-30%, bbls., same basis..lb. .40 - —
31-45%, bbls. same oasis. lb. .41 - —
45-49%, bbls., same basis..lb. .44 - —
reduced color, 25%, bbls., same basis..lb. .19 - —
Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Chromium oxide, hydrated, dms., bbls., c.l., frt. alld..lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld..lb. .39¾ - —
l.c.l., same basis..lb. .40¼ - —
Dyes (see Dyes, coaltar).

Green, malachite, straight, PTMA, bbls., works..lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls..lb. 3.50 - —
water dispersable, bbls..lb. 1.71 - —
Pigment B, kegs..lb. 1.35 - —
paste, kegs..lb. .38 - —
Grindelia robusta herb, bls..lb. .38 - .40
Guaiacol, NF, cryst., dms., tins lb 2.10 - 2.15
liq., cbys., dms..lb. 2.30 - 2.40
Carbonate, NF VII, dms..lb 3.40 - 3.45
Gum, aloe (see Aloe).
Arabic, amber, sorts, bgs..lb. .22 - .23
powd., USP, bbls..lb. .27 - .28
Asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs..lb. .38 - .42
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
smaller lots, same basis..lb. .57 - —
Copal, Congo, No. 1, bgs..lb. .23 - —
No. 2, bgs..lb. .18½ - .20
No. 3, bgs..lb. .16½ - .18
Manila C, bgs..lb. .42 - .44
CBB, bgs..lb. .37 Nom.
DBB, bgs..lb. .33 - .35
DK, bgs..lb. No Stocks
dust, bgs..lb. .14 - .16
MA, soft, bgs..lb. .23 - .25
WS, bgs..lb. .34 - .36
Philippine, pale, chips, bgs lb. .24 - .26
nubs, bgs..lb. .34 - .36
seeds, bgs..lb. .20 - .22
sorts, bgs..lb. .22 - —
Pontianak, chips, bgs..lb. .28 - —
nubs, bgs..lb. .39 - .40

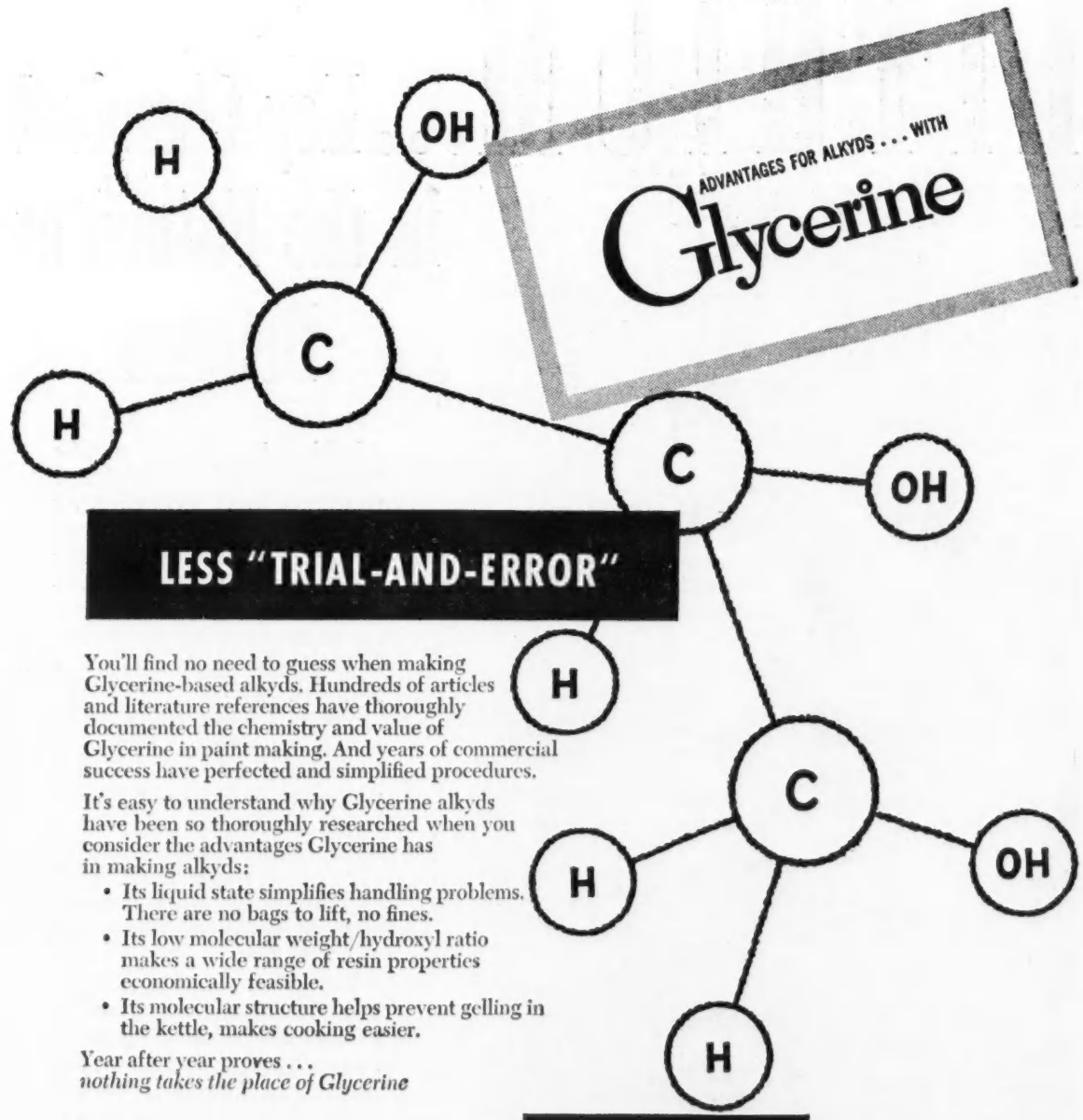
Gum, dammar, Batavia, A/E, cs. lb. .27 - .29
dust, bgs..lb. .16½ - .17½
E, bgs..lb. .20 - .22
East India, batu, bold, bgs..lb. .14 - .15½
nubs and chips, bgs..lb. .08 - .09
black, bold, bgs..lb. .14 - .16
unscraped, bgs..lb. .11 - .13
nubs and chips, bgs..lb. .11 - .13
pale, chips, bgs..lb. .14½ - .15½
nubs, bgs..lb. .17½ - .19½
Siam, cs..lb. .38 - —
Singapore, No. 1, bgs..lb. .45 - .48
No. 2, bbls..lb. .29 - .30
No. 3 bbls..lb. No stocks.
dust, bgs..lb. .16½ - .17
seeds, bgs..lb. .20 - .22
Ester, gum-rosin type dms., c.l., dlvd. Ill., Ind., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St Louis, St. Paul, Va., W. Va lb. .14½ - .16
wood-rosin type, dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs., l.c.l. lb. .40 - .50
tech. grade, bgs., c.l..lb. .32 - —
Karaya, No. 1, NF, powd., bbls. lb. .55 - —
No. 2, powd., bbls. .lb. .45 - —
No. 3, powd., bbls..lb. .40 - —
Locust bean, powd., bgs..lb. .28 - .30
Myrrh, cs..lb. .38 - .40
Opium (see O).
Olibanum siftings, cs..lb. .15 - .20
tears, cs..lb .22 .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).

Furan—Hexalin

Gum, tragacanth, No. 1, ribbons, cs. lb. 3.00 - 3.50
No. 2, cs..lb. 2.55 - 2.60
No. 3, cs..lb. 1.75 - 1.80
powd., USP, bbls..lb. 1.25 - 1.33
Gypsum, plaster of paris, 100-lb. paper, bgs. trucks, dlvd. N. Y. C ton 20.30 - —
terra alba, dom., paper bgs., same basis..ton. 19.00 - —
works, N. Y. C..ton. 16.00 - —
imp. English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse..ton. 60.00 - 62.00

H

Hawthorn berries, bgs..lb 22 - .32
Heliotropin, cryst., cns..lb. 4.05 - 4.50
Hellebore root, dom., green, bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l..lb. .47 - —
No. 2, bbls. l.c.l..lb. .43 - —
No. 3, bbls. l.c.l..lb. .41 - —
No. 4, bbls., l.c.l..lb. .39 - —
No 5, bbls., l.c.l..lb. .37 - —
paste, No 1 bbls. l.c.l..lb. .20½ - —
Henbane leaves, bls..lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex..gal. .14¾ - —
Borger, Tex..gal. .14¾ - —
Hesperidin methylphalcone, bots., works lb 50.00 - —
Hexachlorophene, dms..lb. 1.98 - —
Hexalin (see Cyclonexanol).



LESS "TRIAL-AND-ERROR"

You'll find no need to guess when making Glycerine-based alkyds. Hundreds of articles and literature references have thoroughly documented the chemistry and value of Glycerine in paint making. And years of commercial success have perfected and simplified procedures.

It's easy to understand why Glycerine alkyds have been so thoroughly researched when you consider the advantages Glycerine has in making alkyds:

- Its liquid state simplifies handling problems. There are no bags to lift, no fines.
- Its low molecular weight/hydroxyl ratio makes a wide range of resin properties economically feasible.
- Its molecular structure helps prevent gelling in the kettle, makes cooking easier.

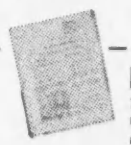
Year after year proves . . .
nothing takes the place of Glycerine

This balanced group of properties keeps Glycerine's usefulness growing

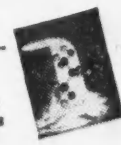
HYGROSCOPICITY • STABILITY • SOLVENT POWER • VISCOSITY • NONVOLATILITY • NONTOXICITY • TASTE • MW/HYDROXYL RATIO • HUMECTANT • CARRIER • SOLVENT • LUBRICANT • SOFTENER • EMOLLIENT • ANTI-FREEZE • ALKYD BASE •

☑ CHECK AND SEND FOR TECHNICAL DATA

☐ 20-page booklet, "Glycerine Alkyds Tailored to Need"



☐ 12-page booklet on Glycerine standards and specifications



☐ 16-page booklet on Glycerine properties and applications

For your free copy of any or all of these booklets write: GLYCERINE PRODUCERS' ASSOCIATION • 295 Madison Ave., New York 17, N. Y.

Hexamethylenetetramine—Lime Salts

Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C. lb. .222 • —
1,000-19,999-lb. lots, same basis lb. .232 • —
smaller lots, same basis lb. .242 • —
fib. dms., 1,000-lb. lots or more, same basis lb. .239 • —
smaller lots, same basis lb. .249 • —
USP, dms., 500-lb. lots or more, same basis lb. .40½- —
smaller lots, same basis lb. .41½- —
Hexane, indust., tanks, Bayonne, N. J gal. .19 • —
Baytown, Tex gal. .15½- —
Borger, Tex gal. .13½- —
1-Hexanol, dms., c.l., works lb. .34½- —
l.c.l., works lb. .35 • —
tanks, works lb. .33 • —
Hexyl cinnamic aldehyde, dms. lb. 4.00 • 7.50
Salicylate, dms. lb. 1.75 • —
Hexylene glycol, dms., c.l., dlvd lb. .16 • —
l.c.l., dlvd lb. .17 • —
tanks, dlvd lb. .14 • —
n-Hexyl methacrylate, dms., less than truckload, works lb. .71 • —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 • —
smaller lots, dlvd lb. 14.50 • —
Histamine diphosphate, USP, bots. kilo 400.00 • —
l-Histidine hydrochloride, NF, fib. dms., 50-kilo lots, works. kilo 80.00 -85.00
1-5 kilo lots, works kilo 90.00 -95.00
Homatropine hydrobromide, USP, bots oz. 6.50 • —
Methylbromide, USP, bots oz. 5.65 • —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.25 • —
Horehound herb, bls. lb. .16 • .19
Hydrastine, bots oz.29.50 -31.00
Hydrochloride, NF, bots oz.29.50 -31.00
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., Lake Charles, La. lb. 3.00 • 3.30
85%, ret. dms., same basis lb. 1.35 • 1.55
Hydrate, 100%, ret. dms., Lake Charles, La. lb. 1.60 • 1.90
Hydrocortisone acetate, bulk, bots., dms. gram. 4.75 • 5.00
Alcohol, bulk, bots., dms. gram. 4.75 • 5.00
Hydrofuramide, dms., fib. ctns., works lb. .30 • .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 • —
l.c.l., works lb. .55 • .60
Fluoride anhyd., cyls., dlvd. E. lb. .30½- .32½
dlvd. W. lb. .39 • —
tanks, works lb. .21 • —
Peroxide, USP, bbls., dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd. lb. .202 • —
l.c.l., dlvd. lb. .211 • —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, bbls., dms. lb. .98 • 1.00
tech., dms., c.l., dlvd lb. .77½- —
l.c.l., same basis lb. .79½- —
Hydroxycitronelial, cns. lb. 7.65 • 7.90
Hyoscine salts (see Scopolamine).
Hyoscyamine, bots oz.15.75 -16.00
Hydrobromide, bots. oz.11.00 -12.00
Sulfate, bots. oz.10.50 -11.50
Hypernic extract, cryst., No. 2, bbls., l.c.l. lb. .52 • —
liq., No. 1, bbls., l.c.l. lb. .35 • —
No. 2, bbls., l.c.l. lb. .27 • —

I

Ichthammol, NF, dms. lb. .60 • .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb.17.00 -21.00
Inositol, bots., dlvd lb. 5.00 • —
cms., dlvd. lb. 4.50 • 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. 1.45 • —
resub, USP, dms., jars lb. 2.30 • 2.32
Iodochlorohydroxyquinolin, USP, dms. lb. 5.90 • —
Iodoform, NF, dms., kgs. lb. 4.90 • 5.00
a-Ionone, cns. lb. 5.10 • 5.85
b-Ionone, cs. lb. 6.00 • 7.70
Methyl (see under M).
Ipecac root, bgs lb. 8.50 • 9.00
powd., bbls., bxs. lb.10.00 -10.25
Irish moss, bleached, prime, bls lb. .30 • .35
Iron compounds (see Ferric or Ferrous).
Isoborneol, cns. lb. 1.25 • 1.70
Isobornyl acetate, cns. lb. .62 • .95
Formate, dms. lb. .80 • —
Propionate, dms. lb. 1.15 • 1.45
Isobutyl acetate, perfume grade, cns lb. .75 • 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same basis lb. .11¼- —
Isobutyraldehyde, CP, dms., c.l., dlvd. lb. .27½- —
l.c.l., dlvd. lb. .28½- —
tech., dms., c.l., dlvd. lb. .21½- —
l.c.l., dlvd. lb. .22½- —
tanks, dlvd. lb. .19½- —
Isoeugenol, cns. lb. 4.40 • 4.75
Isoniazid, powd., bulk, 25-kilo lots or more kilo 23.00 -25.50
smaller lots kilo 24.00 -26.00
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone, dms., c.l., works lb. .24¼- —
l.c.l., works lb. .24¾- —
tanks, works lb .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., c.l., dlvd. lb. .12 • —
l.c.l., same basis lb. .13 • —
tanks, same basis lb. .10 • —
Alcohol (see Alcohol, isopropyl).
Benzene (see Cumene).
Ether, dms., c.l., dlvd lb. .07 • —
l.c.l., dlvd lb. .08 • —
tanks, dlvd lb. .05 • —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works lb. .70 • —
l.c.l., works lb. .714 - .814
Isopropyl-N-phenyl carbamate, 450-lb. fib dms., c.l., t.l., works. lb. .75 • —
l.c.l., works lb. .80 • .90
Isopropylamine (see Mono, Di, or Tri-).
Isoquinoline, dms., works lb .85 • 1.25

J

Jalap root, NF, bls. lb. .45 • .55
powd., bbls., bxs. lb. .55 • .65
Juniper berries, bgs. lb. .18 • .20
Tar, NF, dms. lb. .42 • .60

K

Kaolin (see also Clay China).
NF, powd., fib. dms. lb. .10 • .12
colloidal, fib., dms. lb. .15½- .17½
Kola nuts, bgs. lb. .15 • —

L

Lactose, crude, bgs., c.l., works lb. .15 • .15½
edible, fib. dms., 30,000-lb. lots, works lb. .22 • —
2,000-lb. lots, works lb. .22¾- —
200-1,800-lb. lots, works lb. .23¼- —
Edible lactose in bgs. 1c. lower.
fermentation grade, bgs., c.l., works lb. .03½- —
USP, fib. dms., 30,000-lb. lots, works lb. .24 • —
2,000-lb. lots, works lb. .24¾- —
200-1,800-lb. lots, works lb. .25¼- —
USP lactose in bgs. 1c. lower.
Lady's slipper root, bls. lb. 1.70 • 1.75
Lanolin, cosmetic, dms., works lb. .28 • .30
USP, anhyd., dms., works lb. .26 • .28
hydrous, dms., works lb. .25 • .27
Lard, cash, dms., Chicago lb. .1175- —
Larkspur seed, bgs lb. .20 • .23
Laurel leaves, Greek, bls. lb. .11½- .12
Portuguese, bls. lb. .11 • —
Turkey, bls. lb. .25 • —
Yugoslavia, bls. lb. .11 • —
n-Lauryl methacrylate, dms., c.l. or t.l., works lb. .65½- —
Lavender flowers, medium, bls lb. .55 • .60
ord., bls lb. .16 • .20
select., bls lb. .90 • —
Lead acetate, white, cryst., bbls lb. .22 • —
gran., bbls lb. .23 • —
powd., bbls lb. .23 • —
NF, cryst., gran., powd lb. .31 • .32
Arsenate, acid powder, dealers, 2-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more lb. .27½- —
l.c.l., frt. alld lb. .28½- —
1-lb. bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic, sulfate, bbls., c.l., shipt. point, frt. alld. lb. .16¼- —
l.c.l., same basis lb. .17¼- —
Carbonate (see Lead, white, basic Carbonate).
Chloride, dms. lb. .45 • —
Iodide, NF, V jars lb. 3.82 • —
Linoleate, fused, 26%% Pb, dms. lb. .33 • —
Metal pigs, prime, N. Y. lb. .15½- —
St. Louis lb. .1530- —
Metallic paste, dms., 20,000-40,000-lb. lots, works lb. .33¾- —
10,000-20,000-lb. lots, same basis lb. .34¾- —
200-2,000-lb. lots, same basis, lb. .35¾- —
Prices ex wnse, Jersey City, N. J., 4½c. per lb. higher.
Monosilicate, bgs., c.l., works, frt. equald lb. .1620- —
l.c.l., same basis lb. .1670- —
Naphthenate, liq., 16% Pb, dms., dlvd lb. .17 • —
24% Pb., dms., dlvd lb. .21 • —
solid, 37% Pb., dms., dlvd lb. .27½- —
Nitrate, bbls. lb. .22¼- —
Orthosilicate-silica gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Peroxide, tech., powd., bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. .41 • —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld. lb. .18 • —
l.c.l., same basis lb. .18½- —
97% Pb_3O_4, bbls., c.l., same basis lb. .18¼- —
l.c.l., same basis lb. .18¾- —
98%Pb_3O_4, bbls., cl., same basis, lb. .18½- —
l.c.l., same basis lb. .19 • —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½- —
Salicylate, normal, dms., works lb. .46 • —
Silicate (see Lead, white, basic, silicate).
Sulfate (see Lead, blue, basic sulfate, Lead white, basic sulfate).
Tallate, liq., 16% Pb, dms. lb. .15 • —
24% Pb., dms. lb. .18½- —
solid, 30% lb. .23¼- —
White, basic carbonate, bgs., c.l., shipt. point, frt. alld. lb. .17½- .18
l.c.l., same basis lb. .18½- .19
silicate, bgs., c.l., shipt. point, frt. alld. lb. .16¼- .19
l.c.l., same basis lb. .17¼- .20
sulfate, bgs., c.l., shipt. point, frt. alld. lb. .16¼- —
l.c.l., same basis lb. .17¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .15 • .17
l.c.l., same basis lb. .15½- .17½
unbleached, non-ret. dms., c.l., same basis lb. .13 • .15
l.c.l., same basis lb 14½- 16¼
dl-Leucine dms., works lb.12.25 -15.00
Licorice root, whole, bbls. lb. .10 • .12
gran., bbls lb. .15 • .17
powd., bbls lb. .12 • .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
l.c.l., works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan, N. Y. destination, freight equalized with nearest producing point ton.18.71 • —
Hydrated, bulk, c.l., same basis. ton.20.21 • —
Spray, bgs., c.l., same basis. ton.23.21 • —
Lime salts (see Calcium).

LITHIUM...Key Chemical in the Future of Defense

Lithium is nothing new. The element was discovered nearly 140 years ago, but lay dormant. As late as World War II, only two significant applications utilizing Lithium existed; both were military: Lithium Hydride as a hydrogen carrier in air-sea rescue kits; Lithium Hydroxide for multi-purpose greases.

Today, Lithium serves America's defenses on the ground, in the air, and over and under the sea. You will find Lithium used in low temperature dry cell batteries, in the deicing of parked aircraft, in the air conditioning of naval vessels, in low temperature, all-purpose greases to mention but a few.

The future of Lithium in war, or in defense of peace, is infinite —no one can gauge it. Propellants, new high temperature alloys, cermets, chemical processes—all hold promise of great developments to come. You are invited to explore this treasure house of the present —*and the future*—with us.

... trends ahead in industrial applications for Lithium

LITHIUM CORPORATION OF AMERICA, INC.
2530 RAND TOWER
MINNEAPOLIS 2, MINN.

MINES: Keystone, Custer, Hill City, South Dakota • Bessemer City, North Carolina • Cat Lake, Manitoba • Ames Area, Quebec • BRANCH SALES OFFICES: New York Pittsburgh • Chicago • CHEMICAL PLANTS: St. Louis Park, Minnesota • Bessemer City, North Carolina • RESEARCH LABORATORY: St. Louis Park, Minnesota

Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone, grd., bgs., works..ton. 3.50 - 4.00
Linatool, ex bois de rose oil, dms. lb. 6.20 - 8.00
ex lignaloe wood oil, dms.....lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms..lb. 6.15 - 7.95
96-98%, dms .....lb. 6.75 - 7.15
ex petitgrain, bots. .....lb. 5.95 - 6.70
Lindane, 25% formulation, dealers, dms., works lb. 1.58 - —
99%, tech., dealers, dms., dlvd., lb. 3.10 - —
Linden flowers with leaves, bls lb. .30 - —
without leaves, bls.....lb. .35 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills..ton.65.00 Nom.
extracted, 36% bulk, same basis. ton.60.00 -61.00
Litharge, coml., powd., bbls., c.l., works, frt. equald..lb. .17 - —
l.c.l., same basis..lb. .17½ - —
Lithium benzoate, dms.....lb. 1.65 - 1.67
Bromide, NF, dms., works, frt. equald. lb. 2.30 - —
Carbonate, NF, dms., c.l., t.l., dlvd. lb. 1.29½ - —
ton lots to t.l., dlvd... lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld., works. lb. .85 - 1.12½
l.c.l., same basis. lb. .90 - 1.13½
Chloride CP, anhyd., ton lots lb. 1.28½ - —
tech., cryst., dms., c.l., t.l., dlvd. or works, frt. alld. lb. 1.05 - 1.10½
l.c.l., same basis..... lb. 1.10 - 1.25
Citrate, NF, dms .....lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd...lb. 2.17½ - —
ton lots, dlvd .....lb. 2.18½ - —
less ton lots, dlvd.....lb. 2.23½ - —
Hydride, powd., dms., works. lb.14.00 - —
Hydroxide, monohydrate, dms., c.l., t.l., dlvd, or works, frt. alld..lb. .90 - .90½
l.c.l., same basis.....lb. .91½ - .96
Manganite, dms., works.....lb. .95 - 1.15
Nitrate, tech., dms., 100-lb. lots. lb. 1.25 - —
Salicylate dms .....lb. 1.60 - 1.70
Silicate, dms., works.....lb. 1.10 - 1.30
Sulfate, dms., c.l., works.....lb. .47½ - —
ton lots, works.....lb. .48½ - —
less-ton lots, works.....lb. .53½ - —
Titanate dms., works .....lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd..lb. .07½ - —
l.c.l. dlvd.....lb. .08¼ - .08½
titanated (high-strength), bgs., c.l., dlvd..lb. .10 - —
l.c.l., dlvd.....lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls .....lb. .73 - —
Lobeline sulfate, bots., works..oz.37.50 -39.00
Logwood extract, cryst., No. 1, bbls., l.c.l. lb. .41 - —
No. 2, bbls., l.c.l.....lb. .39 - —
liq., No. 1, bbls., l.c.l.....lb. .20 - —
No. 2, bbls., l.c.l.....lb. .19 - —
No. 3, bbls., l.c.l.....lb. .18½ - —
solid, No. 1, boxes, c.l.....lb. .35 - —
Lycopodium, cs .....lb. 2.00 - 2.25
dl-Lysine hydrochloride, bots..kilo.140.00 -150.00

M

Mace, Siauw, siftings, bls.....lb. 2.25 - 2.65
West Indian, No. 1, bls. shipment lb. No sales.
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼ - 28
syn. rubber grade, light, bgs., c.l., works lb. .29¼ - —
l.c.l., works .....lb. .30 - —
extra light, works.....lb. .29¼ - .30
USP, light, ctns.....lb. .55 - .56
heavy, bbls.....lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton.38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½ - —
l.c.l., frt. equald lb. .12 - .13
truckloads, frt. equald lb. .11 - —
USP, bgs., c.l., frt. equald..lb. .12½ - —
t.l., frt. equald.....lb. .13 - —
l.c.l. frt. equald.....lb. .14 - .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works..lb. .12¾ - —
l.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton.50.00 - —
l.c.l., works.....ton.55.00 -105.00
Gluconate, dms., cns .....lb. 1.30 - 1.37
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½ - .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works lb. .32½ - —
pigs, 10,000-lb. lots or more, works lb. .33¼ - —
sticks, cs., works, frt. alld. on carlots lb. .49 - —
Oxide (see Magnesia, calcined).
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc).
Silicofluoride, bbls., works lb. .10 - .11½
Sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
t.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots..lb. .36 - —
1,000-lb lots lb. .40 - —
100-lb lots lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malathion, dms., c.l., works....lb. .90 - —
l.c.l., works.....lb. .92 - 1.02
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd E.....lb. .28 - —
tanks, dlvd E.....lb. .26 - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls.....lb. .38 - —
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs .....lb. .16 - —
Borate, tech., fib. dms.....lb. .25 - —
Carbonate, bbls., works .....lb. .22 - —
Chloride, anhyd., dms., works..lb. .25½ - —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works..ton.97.00 - —
paper bgs., works....ton.93.50 - —
dms., works.....ton.101.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Gluconate, dms.....lb. 1.79 - 1.93
Hydrate, bbls., dlvd.....lb. .36 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Linoleate, liq., 4.35% Mn., dms. lb. .32½ - —
solid, precip., 8.2% Mn, bbls. lb. .37½ - —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn, dms. lb. .24 - —
precip., 6½-7% Mn, dms lb. .28 - —
Sulfate, fertilizer grade, 65%, bgs., c.l., dlvd, S. E....ton.60.50 - —
l.c.l., dlvd, S. E ....ton.67.50 - —
Tallate, 6%, dms .....lb. .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.71.00 - —
So. American 30% tannin, c.l., tannin, c.l., ex dock..ton.58.00 - —
Mannitol, coml., fib. dms., c.l., works lb. .60 - —
single dm., works.....lb. .65 - —
ton-lots, works .....lb. .62 - —
MBT (see 2-Mercaptobenzothiazole).
MBTS (see Mercaptobenzothiazyl disulfide).
Melamine, bgs., ton lots, works lb. .33 - —
500 to 2,000-lb. lots, works lb. .33½ - —
smaller lots, works .....lb. .38½ - —
Menadione, USP, bots. .....gram. .044 - .05
Menthol, nat., USP, Brazilian, cs..lb. 8.00 - 8.25
syn., USP, racemic, cns .....lb. 4.95 - —
Menthyl salicylate, tins .....lb. 4.00 - 4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton-lots, works, frt. alld lb. .40 - —
less ton lots, same basis lb. .42 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .50 - —
less ton lots, same basis lb. .52 - —
Mercuric chloride, NF, cryst., cms., 50-lb. lots or more lb. 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF VIII, powd., fib. dms. lb. 6.84 - —
Mercuric iodide, red, NF, fib. dms.lb. 7.72 - —
Oxide, red, NF, powd., fib. dms. lb. 5.90 - 6.01
yellow, tech. (see Yellow, mercury oxide).
USP, fib. dms..... lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF..... lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP).
Metal, 76 lb. per flask net-flask.280.00 - —
Mesityl oxide, dms., c.l., dlvd. lb. .1350- —
l.c.l., dlvd. ..... lb. .1450- —
tanks, dlvd. ..... lb. .1150- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Choloraniline)
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld ..... gal. .70 - —
Prices on natural methanol W. of Miss. 3c. higher.
syn., Zone 1, dms., c.l., dlvd., or truckload min., frt. alld. gal. .45 - —
l.c.l., same basis gal. .51 - —
tankwagon, 2,000-4,000-gal. lots, dlvd. Metropolitan areas. gal. .33 - —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .30 - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .27½ - —
Zone 2, dms., c.l., or truckload min. frt. alld. or dlvd..gal. .48 - —
l.c.l., same basis ..... gal. .54 - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .36 - —
Methanol, syn., Zone 2, tanks, 4,000 gal., min., frt. alld. or dlvd. gal. .33 - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms cs. frt. alld lb. .61 - .64
Methyl abietate, non-ret, dms., c.l., dlvd, zone 1 lb. .20½ - —
t.c.l., same basis ..... lb. .21 - —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1..... lb. .21 - —
t.c.l., same basis ..... lb. .21½ - —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., t.c.l., E. of Miss., frt. alld gal. .62½ - —
syn., dms., c.l., frt. alld. E gal. .57 - —
t.c.l., frt. alld. E ..... gal. .63 - —
tanks, frt. alld. E ..... gal. .43 - —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.

Sodium Tripolyphosphate

Tetrasodium Pyrophosphate
ANHYDROUS

Sodium Polyphos
(SODIUM HEXAMETAPHOSPHATE)
(SODIUM TETRAPHOSPHATE)

Trisodium Phosphate
CRYSTALLINE
MONOHYDRATE

Sodium Phosphates

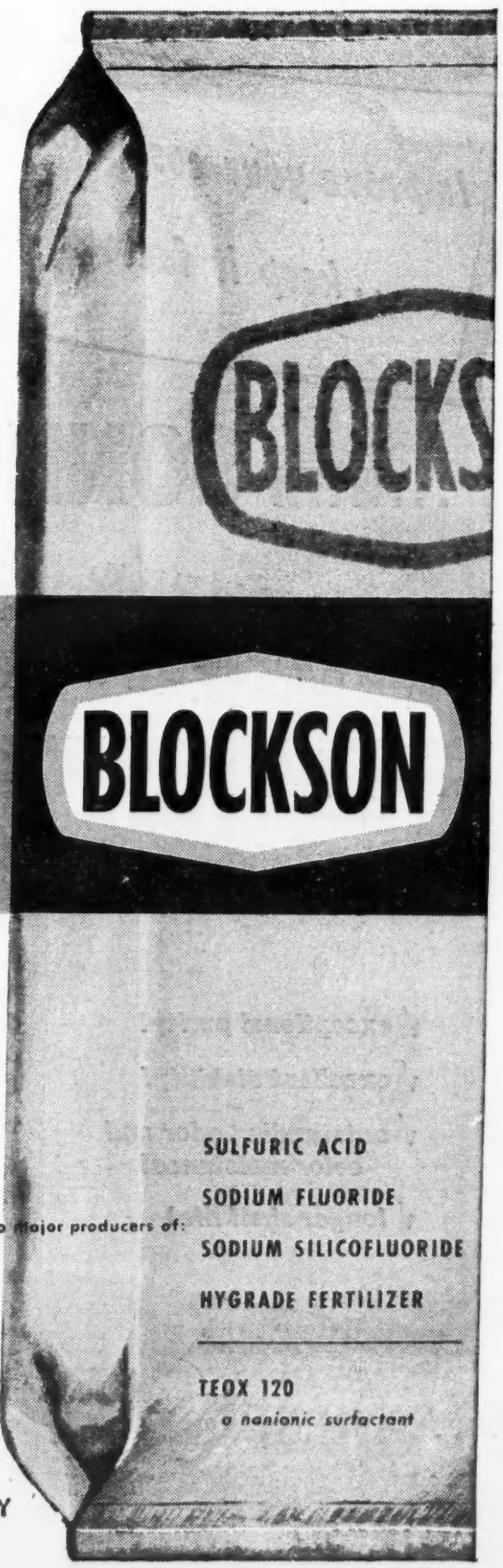
Trisodium Phosphate
Chlorinated

Disodium Phosphate
ANHYDROUS
CRYSTALLINE

Monosodium Phosphate
ANHYDROUS
MONOHYDRATE

Sodium Acid Pyrophosphate

BLOCKSON CHEMICAL COMPANY
Division of Olin Mathieson Chemical Corporation
JOLIET, ILLINOIS



Methyl Acrylate—o-Nitrobiphenyl

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 • —
l.t.l., dlvd lb. .40 • —
tanks, dlvd lb. .37 • —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E. lb. .15 • —
l.c.l., dlvd. E lb. .16 • —
tanks, dlvd. E lb. .13 • —
Ketone, dms., works lb. 1.05 • —
Anthranilate, cns. lb. 2.50 • 2.65
Benzoate, cns., dms lb. .53 • .63
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 • .61
Cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .73 • —
2,000-lb. lots and more, same basis lb. .65 • —
smaller lots, frt alld. on 100 lbs lb. .89 • 1.00
standard vis., 15,400 cps.), 50-lb., bgs., c.l., frt. alld lb. .66 • —
2,000-lb. lots and more, same basis lb. .72 • —
smaller lots, frt. alld. on 100 lbs lb. .75 • .85
Chloride, indust., cyls., frt. equald. lb. .21 • —
tanks, multi-unit, same basis lb. .15 • —
single unit, same basis lb. .11½- —
Chloroform, dms., c.l., works lb. .13½- —
l.c.l., works lb. .16¼- —
tanks, works lb. .12½- —
refrigerator mfrs., cyls., dlvd. lb.
other consumers or service men, cyls., dlvd lb. .45 • —
Cinnamate, cns. lb. 1.43 • 1.80
Methyl cyclohexanol, dms., c.l., works lb. .35½- —
l.c.l., works lb. .36 • —
tanks, works lb. .34 • —
Ethyl ketone, dms., c.l., dlvd. lb. .13 • —
l.c.l., dlvd lb. .14 • —
tanks, dlvd lb. .11 • —
Formate, refd., dms lb. .35 • .40
tech., non-ref. dms., any quantity, works lb. .10 • —
Heptin carbonate, bots. lb. 33.00 -42.00
p-Hydroxybenzoate, fib. dms. lb. 1.90 • 2.00
Ionone, standard, cns., dms. lb. 5.10 • 5.85
Isobutyl carbinol, dms., c.l., dlvd. lb. .15 • —
l.c.l., dlvd lb. .16 • —
tanks, dlvd lb. .13 • —
Ketone, dms., c.l., dlvd lb. .15 • —
l.c.l., dlvd. lb. .16 • —
tanks, dlvd. lb. .13 • —
Methacrylate, dms., c.l., t.l., frt. equald with Belle, W. Va. lb. .36½- —
smaller lots, same basis lb. .37 • —
tanks, same basis lb. .35 • —
Naphthyl ketone, cryst., cns lb. 3.60 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Roseaniline, chloride, NF fib. dms., 5-lb. lots lb. 5.64 • —
Salicylate, USP, cns., 500-lb. lots lb. .56 • —
Testosterone, USP, 100-gram bots. gram. .68 • —
2-Methylbenyzlamine, dms., l.c.l., works lb. 1.25 • —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 • —
l.c.l., works lb. 1.90 • —
2-Methyl-5-ethyl pyridine dms., ex. works lb. .47½- —
l.c.l., works lb. .48 • —
tanks, works lb. .46 • —
Methylene blue, fib, dms., 100-lb. lots, frt, adjusted lb. 3.25 • 3.60
smaller lots, same basis lb. 3.40 • 3.60
Chloride, tech., dms., c.l., dlvd. E lb. .12½- —
l.c.l., same basis lb. .15 • —
tanks, same basis lb. .11¼- —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 • —
Methylparaben (see Methyl p-hydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 • .04
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06¼- —
l.c.l., ex-whse. or frt. alld. E lb. .07 • —
paint or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
l.c.l., ex-whse. or frt. alld. E lb. .08½- —
rubber, bgs., c.l., works, frt. alld. E lb. .07½- —
l.c.l., ex-whse. or frt. alld. E lb. .08½- —
wallpaper, bgs., c.l., works, frt. alld., E lb. .07¾- —
l.c.l., ex-whse. or frt. alld. E lb. .08¼- —
white, extra, fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
l.c.l., ex-whse or frt. alld. E lb. .08½- —
Mica, wet-grd. W. of Miss. R. ½c. higher. W. of Rockies, 1c higher.
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .10¼- .11½
New York gal. .12½- —
Molybdenum (metal), powd., 99 or 200 mesh, ctns., works kilo. 8.80 • —
Trioxide, pure, kgs., works lb. 1.05 • —
tech., kgs., works, basis Mo. content lb. 1.25 • —
Monobutylamine, dms., c.l., E. of Rockies lb. .53 • —
l.c.l., same basis lb. .56 • —
tanks, same basis lb. .53 • —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 • —
l.c.l., same basis lb. .11 • —
tanks, same basis lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27 • —
l.c.l., same basis lb. .28 • —
tanks, same basis lb. .25 • —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E lb. .35 • —
l.c.l., dlvd. E lb. .36 • —
tanks, dlvd. E lb. .33 • —
Monoethylaniline (see N-Ethylaniline).
Monoethylortotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27 • —
l.c.l. same basis lb. .28 • —
tanks, same basis lb. .25 • —
Monoisopropylamine, dms., c.l., dlvd., lb. .32 • —
l.c.l., same basis lb. .33 • —
tanks, same basis lb. .30 • —
Monomethylamine, 30-35% soln., dms., c.l., frt equald., 100% basis. lb. .40 • —
l.c.l., frt. equald, 100% basis. lb. .40½- —
tanks, frt. equald, 100% basis. lb. .31 • —
40% soln., dms., c.l., frt. equald., 100% basis lb. .37 • —
l.c.l., frt. equald, 100% basis. lb. .37½- —
tanks, frt. equald., 100% basis. lb. .31 • —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Glutamate (see Sodium glutamate monobasic)
Phosphate (see Sodium phosphate monobasic)
Morphine, cns. oz. 12.40 -12.60
Acetate, anhyd., cns. oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 • 9.95
Hydrochloride, NF, cns oz. 9.90 • 9.95
Sulfate, USP, cns oz. 9.90 -10.05
Morpholine dms., c.l., dlvd. E lb. .54¾- —
l.c.l. dlvd E lb. .55¾- —
tanks, dlvd E lb. .52¾- —
Musk, syn., ambrette, 100-lb. lots, fib. dms lb. 5.15 • —
25-lb lots, cns lb. 5.20 • —
5-lb. lots, cns lb. 5.30 • —
ketone, 100-lb. lots, fib. dms. lb. 5.30 • —
25-lb tots cns lb 5.35 • —
5-lb. lots, cns lb. 5.45 • —
xylol, 100-lb. lots, fib. dms lb. 1.40 • —
25-lb lots, cns lb. 1.45 • —
5-lb lots, cns lb. 1.50 • —
Mustard seed, Danish, yellow, bgs lb. .11½- .12
Dutch, yellow, bgs lb. No prices
English, yellow, bgs. lb. .13 • —
Montana, oriental, bgs lb. .09½- —
yellow, bgs. lb. .11½- —
Myrobalans, J-1, assorted, bgs., ex dock ton. 58.00 • —
crushed, bgs., ex dock ton. 82.00 • —
Bombay, bgs., ex dock ton. 55.00 -56.00
extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 • .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S).
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 • —
imp., 78°, large lots lb. .07 Nom.
refd., dms., indust., chipped or crushed, bgs., frt. equald lb. .12¾- —
flake, bgs., same basis lb. .14 • —
tanks, same basis lb. .11¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, basis lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs. c.l., same lb. .18½- —
fib. dms., c.l., same basis lb. .13 • —
chipped, 100-lb. paper bgs., same basis lb. .12½- —
a-Naphthol, bbls., frt. alld lb. 1.00 • —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 • —
l.c.l., works lb. .35 • —
Benzoate, fib. dms., works lb. 3.00 • —
custom contract, works lb. 1.65 • —
Salicylate, dms. lb 5.00 • —
Sulfate, cns lb. 35.00 • —
a-Naphthylamine, bbls., frt. alld lb .50 • —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 • —
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 • 8.00
Neomycin, fib. dms., 1 kilo lots, basis, activity gram. .45 • —
500-999 gram lots, basis, activity gram. .50 • —
Nerolin, cns lb. 2.45 • 2.65
Niacin (see Acid, nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .77 • .90¼
Carbonate bbls., dlvd lb. .73¾- .81¾
Chloride, bbls., dlvd lb. .38½- .46½
Formate, bbls., ton lots, frt. alld. lb. .68 • .69
Metal, electro cathodes, cs., works lb. .64½- —
Nitrate, bbls., works lb. .37 • .38
Oxide, black, bbls lb. .76 • —
green, bbls lb. .76 • —
Sulfate, bgs., c.l., dlvd lb. .30¼- —
l.c.l., dlvd lb. .31¼- .38¼
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms., frt. adjusted. kilo. 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 • —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 • —
Niger seed, bgs lb. .11 • .11¼
Niketham ide, cbys lb. 5.00 • —
m-Nitroaniline, dms., frt. alld lb. 1.05 • —
o-Nitroaniline, flaked, dms lb. .54 • .57
powd., dms lb. .60 • —
p-Nitroaniline, dms., c.l., frt. alld. lb. .48½- —
l.c.l., frt. alld lb. .51½- —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 • —
l.c.l., frt. alld lb. .13 • —
tanks, frt. alld lb. .11 • —
o-Nitrobiphenyl, tech., dms., c.l., works lb. .14½- —
l.c.l., works lb. .15 • —
tanks, works lb. .13 • —

Improve your cosmetic product ...keep it factory fresh

...WITH SONNEBORN'S VITAMIN E FORTIFIED CARNATION WHITE MINERAL OIL

Creams, hair oils, hair dressings, suntan oils . . . whatever your cosmetic product . . . the White Oil you use should be fortified with Vitamin E to assure greatest stability against odor and color development. Now Sonneborn Research Laboratories have developed and patented a Vitamin E-fortified white oil—CARNATION White Mineral Oil—to help make your finished product better . . . keep it factory fresh.

√ exceptional purity!
√ excellent stability!
√ outstanding odor and color resistance!
√ longer shelf life!

Give your cosmetic product the stability, the superior shelf life, the greater customer satisfaction—which CARNATION White Oil can help assure.

Why take chances when protection costs no more! Insist on Sonneborn CARNATION White Oil fortified with Vitamin E!

Achieved by Sonneborn RESEARCH

L. SONNEBORN SONS, INC.
New York 10, N.Y.

Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15 20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l., same basis lb. .36 - —
l.c.l., same basis lo. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms., c.l., frt. alld. lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-4-chlorophenol, dms lb. .75 - —
Nitroethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —
Prices West of Rockies are 1c. higher.
Nitrogen solution, 37%N, tanks, frt. equald., per ton of product basis ton.46.50 - —
40.8%N, tanks, same basis ton.51.15 - —
Nitrogenous process rankage, bulk, works unit-ton. 4.00 - 5.10
Sewage sludge bulk works unit-ton. 2.95 + .50
Nitromethane, dms., c.l., dlvd. E lb. .24 - —
l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —
Prices West of Rockies are 1c. higher.
2-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nitropropane-1, and -2, dms., c.l., dlvd. E lb. .22½- —
l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —
Prices West of Rockies are 1c. higher.
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., works, frt. equald lb. .50 - —
o-Nitrotoluene, dms. c.l., frt. alld. lb. .10 - —
l.c.l., frt. alld lb. .11 - —
tanks, frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - .36
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether, conc., bots 100-lb. lots lb. 1.28 - 1.35
Nonyl phenol, dms. c.l., frt. alld. lb. .26 - —
l.c.l., frt. allo lb. .27 - —
tanks, frt. allo lb. .24 - —
Nutgalls, Aleppo, bgs lb. .36 - .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs lb. .60 - .62
West Indian, bgs lb. .60 - —
Nux vomica, oils lb. .10 - .12
powd., bbls., bxs lb. .15 - .17

O

Octane, indust., tanks Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol tech. dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .23¼- —
l.c.l. works lb. .23¾- —
tanks, works lb. .22½- —
Drum prices for octyl phenol are 1c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns lb. 3.00 - 3.50
Almond, artif., bitter (see Benzaldehyde).
nat., bitter, F.P.A., bots lb. 3.00 - 3.75
NF, bots. lo. 3.25 - 3.75
sweet, USP, dms., cns. lb. .62 - .80
Allspice (see Oil, pimento).
Amyris, dms. lb. 1.35 - 1.95
Angelica root, bots. lb.66.00 -100.00
seed, bots lb.56.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 3.25 - 4.00
Apricot, kernel, USP, dms. lb. .38 - .50
Avocado, cns. lb. 3.25 - —
Babassu, crude, tanks lb. .15¼- —
Bay, NF, Puerto Rican, 50-55%, cns. lb. 1.80 - 2.75
55-60%, cns. lb. 2.10 - 2.50
West Indian, 50-55%, cns., dms., lb. 1.85 - 2.40
Bergamot, nat., NF, Italian, cns. lb. 8.50 -11.00
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, NF, cns lb. 1.75 - —
Bois de rose, Brazil, dms lb. 4.55 - 5.60
Mexican (see Oil lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns lb. 1.75 - 2.10
redist., USP, cns lb. 2.25 - 3.00
Calamus, bots lb.12.00 -20.00
Camphor, sassafrassy, dms lb. .40 - .60
white, dms lb. .21 - .50
Cananga, native, cns lb. 7.85 -10.25
rectified, cns. lb.12.00 -14.75
Caraway, NF, cns lb. 3.75 - 5.00
Capsicum (see Capsicum oleoreson).
Cardamom, NF, bots lb.32.00 -40.00
Cassia, USP (see Oil, cinnamon, USP).
Castor, blown, dms., c.l. lb. .2025- —
l.c.l. lb. .2075- —
dehydrated, bodied, dms., c.l. lb. .2235- —
l.c.l. lb. .2285- —
tanks lb. .2085 Nom.
unbodied, dms., c.l. lb. .2085- —
l.c.l. lb. .2135- —
tanks lb. .1935 Nom.
hydrogenated, bgs, c.l., dlvd lb. .21 - —
l.c.l., dlvd lb. .27 - —
No. 3, tech., dms., c.l. lb. .1550- —
l.c.l. lb. .1600- —
tanks lb. .1400- —
No. 1, Brazilian, tanks lb. .14½- —
USP, dms., c.l. lb. .1775- —
l.c.l. lb. .1825- —
tanks lb. .1625- —
refd. and deodorized, dms., c.l. lb. .1900- —
l.c.l. lb. .1975- —
tanks lb. .1750 Nom.
Cedarleaf, USP, XII, cns., dms. lb. 2.90 - 3.50
Cedarwood, cns., dms lb. .62 - 1.00
Celery seed, bots lb.12.50 -20.00
Chamomile, blue, Hungarian, bots. lb.90.00 -180.00
Chenopodium, NF, cns lb. 3.60 - 5.00
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb.25.00 -70.00
leaf, crude, dms lb. 1.30 - 2.00
USP, cns., dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms lb. 1.00 - 1.70
Java, true, dms lb. No prices.
Java-type, cns. lb. 2.00 - 2.25
Clove, bud, USP, cns., dms. lb. 2.85 - 4.00
leaf, crude, dms lb. 1.30 - 2.00

Oil, coconut, crude, tanks, N. Y. lb. .12¼- —
Pac. Coast lb. .10¾- —
refd., Cochin type, dms., tax incl., l.c.l. lb. .19½- —
deodorized, tax incl., dms., l.c.l. lb. .21½- —
Cod, Newfoundland, dms lb. .11 - —
Codliver, USP, dms gal. 1.50 - 1.60
Copaiba, cns lb. 1.80 - 2.50
Coriander, USP, bots lb.11.75 -17.00
Corn, crude, tanks, works lb. .11¾- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05½- —
refd., salad, dms lb. .16¾- .17
tanks lb. .15¼- —
Costus, bots. lb. 8.00 - —
Cottonseed, crude, tanks, South East lb. .11½- —
Valley lb. .11 - —
Texas lb. .10¾- .11
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms lb. .16¾- .16⅝
tanks lb. .14⅜- —
Creosote (see Creosote, coaltar).
Crude (see Petroleum, crude).
Cubeb, cns. lb. 4.25 - 6.25
Cumin, bots., cns lb. 4.15 - 5.75
Cypress, bots. lb. 5.30 - —
Degras (see D).
Dillseed, bots lb. 2.80 - 4.25
Dillweed, dom., bots., dms lb. 3.50 - 5.00
Dip (see D).
Erigeron, cns. lb. 5.50 - 7.50
Eucalyptus, NF, rectified, 70-80%, drums lb. .70 - 1.05
80-90%, dms. lb. .85 - 1.25
Fennel, sweet, USP, cns. lb. 2.30 - 3.25
Fir, Canada, cns lb. 2.35 - 3.00
Fish, refd., alkali, dms lb. .1400- .1450
kettle-bodied, dms lb. .1630- .1680
light-pressed, dms lb. .1250- .1300
tanks lb. .1100- —

Oil, fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gram, dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gram dms., 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gram, dms. 1,000,000 units. .10½- .11
100,000 A units per gram., dms 1,000,000 units. .12 - .14
200,000 A units per gram., dms 1,000,000 units. .12 - .14
300,000 A units per gram., dms., 1,000,000 units . .12 - .14½
400,000 A units per gram, dms., 1,000,000 units . .12 - .14⅝
500,000 A units per gram., dms 1,000,000 units. .12 - .14⅞
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fusel (see F).
Garlic, pure, bots oz. 5.75 - 9.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns lb.11.50 -14.00
Bourbon, cns lb.12.25 -15.00
Turkish (see Oil palmarosa)
Ginger, dist., bots lb.15.50 -21.00
Grapefruit, dms. lb. 2.00 - 3.25
Grease, No. 1, dms lb. .14¾- .16¼
extra, winter, strained, dms lb. .17¼- .19
prime, burning, dms lb. .18¾- .20¼
Guaiacwood, cns lb. 1.40 - 1.90
Hemlock, cns. lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots lb. 2.75 - 4.00
twice rectified, bots lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb. .38 - .55
Lard (see Oil, grease).

Nitrocellulose—Oil, Oiticica

Oil, laurel leaf, dms., cns lb. 9.75 -12.50
Lavandin, dms., cns lb. 2.85 - 3.55
Lavendar, flower, USP, French, 30-32% ester, cns. lb. 2.85 - 4.60
38-40% ester, cns lb. 9.50 -13.20
40-42% ester, cns lb.10.00 -16.50
spike, Spanish, cns lb. 1.85 - 2.30
Lemon, USP, Calif., cns., dms lb. 4.50 - 5.50
Messina, cns. lb. 4.85 - 9.80
terpeneless nots lb.32.00 -85.00
Lemongrass, cns., dms lb. 1.75 - 2.50
Lignaloe wood, Mex., cns lb. 3.70 - 4.60
Lime, dist., Mexican, cns. lb. 3.00 - 4.75
West Indian, cs. lb. 3.00 - 4.75
expressed, West Indian, cns lb. 7.00 - 8.00
terpeneless, bots. lb.29.50 -100.00
Linseed, raw, dms., c.l., N.Y. lb. .1565- —
l.c.l. lb. .1615- .1663
tanks, f.o.b. Minneapolis lb. .1270- —
New York lb. .1395- —
tankwagon, New York lb. .1425- —
Boiled linseed oil 00c. per lb higher
Mace, dist., cns., dms. lb. 2.75 - 3.60
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic Coast lb. .08¾ Nom.
Gulf ports, bulk, f.a.s lb. .09⅛ Nom.
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .18 - —
syn., bots lb. 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb. .33 - .34
20° cold test, dms lb. .32 - .33
30° cold test, dms lb. .30 - .31
Neroli, NF, French, bots lb.85.00 -310.00
Spanish, bots. lb.32.50 -85.00
Nutmeg, USP, dist., East Indian, cns., dms lb. 4.00 - 4.50
West Indian, cns., dms lb. 4.00 - 4.50
Ocotea cymbarum, dms. lb. .87 - 1.50
Oiticica, liq., dms lb. .15 - .16
tanks lb. .13¾- .14⅛

Oranges are not all alike...

There are as many different varieties of oranges as there are apples. They differ in physical appearance, juice character, peel flavor and in the many constituents which make up the component parts of the fruit. Many oranges that may be comparable in some characteristics may differ widely in others and, in some respects, one may be three or four times as potent as the other.

That is why Exchange Brand California Oil of Orange is the standard the world over for orange flavor excellence. You not only get the benefit of Exchange experience, technical skills and vast fruit resources, but Exchange Brand Oil of Orange is made only from California oranges with peel oil that is far richer in flavor strength and more intense in the aromatic constituents which are universally accepted as true orange flavor.

The cost of flavor is so small, why risk the quality of your product for penny economy? Protect its valuable reputation with the consistent quality and distinctive California feature of Exchange Brand Oil of Orange.

Exchange
OIL OF ORANGE U.S.P.

Sunkist Growers

PRODUCTS DEPARTMENT · ONTARIO, CALIFORNIA • *Produced by* The Exchange Orange Products Co. · Ontario, California
Distributed in the U.S. exclusively by
FRITZSCHE BROTHERS, INC., 76 Ninth Ave., New York 11, N.Y. • DODGE & OLCOTT, INC., 180 Varick St., New York 14, N.Y.

Oil, Oleo—Para-tertiary Butylphenol

Oil, oleo, extra, dms....lb. .14½- .15
Olibanum, bots....lb. 5.50 - 7.65
extra fine, bots....lb. 8.00 - 9.00
Olive, edible, Spanish, dms., duty paid..gal. 2.40 - 2.50
Tunisian, same basis....gal. 2.35 - 2.40
Orange, sweet, dist., cns....lb. .45 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms....lb. .55 - 1.25
Florida, cns., dms....lb. .50 - 1.25
Messina, cns....lb. 3.85 - 5.85
West Indian, cns., dms..lb. 2.50 - 3.65
sesquiterpeneless, bots....lb.65.00 -120.00
Origanum, Spanish, cns....lb. 1.75 - 2.85
Palm, clarif., dms....lb. .13 - .13½
kernel, denat., tanks....lb. .12 - —
Palmarosa, cns....lb. 8.00 -10.00
Paraffin, pale, 100-110 vis., at 100°F, tanks, East Coast refy..gal. .14 - —
Patchouli, dms....lb. 8.00 - 9.50
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills. lb. .17½ Nom.
refd., dms....lb. .22¾- .23¼
tanks....lb. .21¼- —
Pennyroyal, USP imported, cns lb. 2.50 - 3.50
Peppermint, nat., dms....lb. 6.00 - 8.00
redist., USP, dms....lb. 6.55 - 9.00
Persic, USP (see Oil, apricot kernel).
Petitgrain, South American, cns., dms..lb. 3.50 - 4.80
Pimento, berry, NF, dms....lb. 4.20 - 8.00
leaf, cns....lb. 2.60 - 3.10
Pine, dest.-dist., dms., l.c.l., works. lb. .11¼- —
ex-whse....lb. .1325- —
steam dist., dms., ex whse., N.Y.C..lb. .163 - —

Oil, pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars....lb. .16 - —
Red (see Acid, oleic).
Rice, bran, clarif., dms., l.c.l..lb. .18 - —
tanks, dlvd. E....lb. .14 - —
Rose, nat., Bulgarian, bots....oz.43.50 -62.25
Rosemary, Spanish, USP, cns., dms lb. .60 - 1.00
tech., cns., dms....lb. .50 - .70
Rue, bots....lb. 2.00 - 2.50
Safflower, dms., c.l., Atl. coast lb. .1735- —
tanks, same basis....lb. .1585- —
Sage, clary, bots....lb.18.50 -25.00
Dalmatian, cns....lb. 4.60 6.00
Spanish, cns....lb. 1.15 - 1.40
Sandalwood, NF, cns....lb.18.25 -20.00
Sardine, crude, tanks, Pac. coast..lb. .08½- —
Sassafras, artif., dms....lb. .85 - 1.25
nat., dom., USP, dms....lb. 1.75 - 2.10
imp., Brazilian (see Oil ocotea cymbarum).
Savin, cns....lb. 2.75 - —
Savory, cns....lb. 4.25 - —
Sesame, refd., dms....lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works....gal. .44 - —
tanks, works....gal. .23 - —
Snakeroot, Canada, cns....lb.27.50 -31.00
Soybean, crude, tanks, Decatur, lb. .11½- —
foots (soapstocks), acid, 95%, tanks, N. Y..lb. .06¼- —
refd., alkali, dms....lb. .14⅞- .15⅛
tanks....lb. .13⅞- —
clarified, dms....lb. .14⅜- .14⅝
tanks....lb. .12⅞- —
salad, dms....lb. .15⅜- .15⅝
tanks....lb. .13⅜- —

Oil, spearmint, USP, dms....lb. 4.75 - 5.60
Sperm, bleached winter, 45° dms, lb. .1775- .1825
tankcars....lb. .1600- —
nat., winter, 45°, dms....lb. .1675- .1725
tankcars....lb. .1500- —
Spruce, cns., dms....lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 - 9.50
Southern, cns....lb. 2.50 - 3.00
Tall, crude, dms., c.l., works..lb. .03½- —
tanks, works....lb. .02½- —
dist., dms., c.l., works....lb. .07½- —
l.c.l., works....lb. .07¾- —
tanks, works....lb. .06¼- —
refd., dms., c.l., works....lb. .06½- .06¾
l.c.l., works....lb. .06¾- .07¾
tanks, works....lb. .05¼- .05¾
Tallow, acidless, dms....lb. .13 - .14¾
Tangerine, Floridian, dms....lb. 2.00 - 2.80
Tansy, dms....lb. 7.50 - 8.40
Tar acid (See T's).
Pine, coml., dms., c.l., works lb. .528 - .538
l.c.l., works....lb. .601 - —
whse....lb. .712 - —
tanks, works....lb. .427 - .438
rectified, NF, dms., incl., l.c.l., works, South..gal. 1.07 - —
ex whse., N. Y. C..gal. 1.15 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms....lb. 1.70 - 3.75
white, cns....lb. 1.95 - 4.00
tech., white, cns....lb. .40 - 1.85
Tung, dms., c.l., N. Y....lb. .27 - —
l.c.l., same basis....lb. .27½- .27¾
tanks, N. Y....lb. .25½- —
domestic mills....lb. .24½- —
Turkey red (see Oil, castor, sulfonated).
Turpentine, NF, cns., dms....lb. .28 - .45
Vetiver, Bourbon, cns....lb.13.00 -17.00
Haitian, cns....lb.10.50 -17.50
Java, cns....lb.22.50 -40.00
Wheat, germ, 5-gal. dms....gal.10.00 -13.00

Oil, white mineral, tech., 50-65 vis., non-ret. dms. c.l., f.o.b. N. Y..gal. .51½- .54⅛
65-75 vis., non-ret., dms., c.l., same basis gal. 52½- .55
l.c.l., same basis gal. .57½- .58⅛
80-90 vis., non-ret. dms., c.l., same basis gal. .53½- .56⅛
l.c.l., same basis gal. .58½- .59⅛
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62⅛
l.c.l., same basis gal. .64½- .65⅛
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - 68½
l.c.l., same basis gal. .71 - .71½
175-185 vis., non-ret. dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP, 200-210 vis., non-ret., dms., c.l., same basis gal. .73½- .75
l.c.l., same basis gal. .77½- .78
315-355 vis., non-ret. dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns. lb. 6.35 -10.30
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Chenopodium, NF).
Wormwood, cns....lb 5.00 - 6.85
Ylang-ylang, Bourbon, bots....lb.17.00 -30.00
extra, bots....lb.28.00 -40.00
Madagascar, bots....lb No stocks
Oleostearine, bbls....lb. .11 - .11¼
Opium, USP, cns....oz.19.20 -19.45
gran., USP, cns....oz.21.65 -21.90
powd., USP, cns....oz.21.65 -21.90
Orange cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.56 - —
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .33 - .33½
Chrome orange prices are ½c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner....lb. 1.30 - —
Mineral, American, bbls., l.c.l., works..lb. .2085- .2110
Molybdated, bbls....lb. .46 - .46½
o-Nitroaniline toner, kgs....lb. 1.15 - —
Orange peel bitter, Haitian, bls lb. .14 - .16
sweet, bls....lb. .16 - .18
Orris root, Florentine, bls....lb. .45 - .50
powd., bbls., bxs....lb. .50 - .53
Verona, bls....lb. .35 - .40
powd., bbls., bxs....lb. 40 - .45
Orthoaminobiphenyl (see o-Aminobiphenyl).
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthopehenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluuin (see o-Toluidine).
Osage, orange, cryst., No. 1, bbls. l.c.l. lb. .40 - —
extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots....gram. 3.00 - 4.00
Oxyquinolin sulfate, cns., 100-lb. lots, works..lb. 4.75 - 5.00
smaller lots, works....lb. 4.92 - 5.17

P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more..lb. 4.00 - —
Pancreatin, USP bots....lb. 1.90 - 2.10
Papain, USP, African, bots....lb. 3.50 - 4.00
Ceylon....lb. 3.00 - 3.50
Papaverine, nat. or syn. hydrochloride, USP, cns., 25-oz. to 100-oz. lots..oz. 5.00 - —
smaller lots....oz. 5.05 - 5.20
Sulfate, cns....oz. 7.10 - 7.35
Paprika, Roumanian, bgs....lb. .27 - —
Spanish, bgs....lb. .33 - .40
Yugoslavian, bgs....lb. .36 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloroaniline).
Parachloro-orthonitroanilin (see 4-Chloro-2 nitroaniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude scale, white, 121°-123°F, ASTM, solid, c.l., refy lb. .0710- —
fully refd., 122°-124°F, ASTM, slabs loose, c.l., refy lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., refy lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., refy lb. .0855- —
132°-134°, ASTM, slabs, loose, c.l., refy lb. .0855- —
135°-137°F., ASTM, slabs, loose, c.l., refy..lb. .0855- —
Prices for paraffin in bags and ctns., c.l. 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher and under 1,000 lbs. 3.7c. per lb. higher.
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld..lb. .1075- —
l.c.l., frt. alld....lb. .1275- .1375
powd., bgs., c.l., frt. alld..lb. .15½- —
l.c.l., frt. alld..lb. .17 - —
USP X, fib, dms., c.l....lb. .183 - —
1,000-lb. lots....lb. .193 - —
smaller lots....lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l. works lb. .13½- —
l.c.l., works....lb. .14½- —
tanks, works....lb. .11½- —
Paranitroaniiin (see p-nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrophenol (see p-Nitrophenol).
Paranitrotoluene (see p-Nitrotoluene).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).

PROVED PERFORMER

This mass of rubber and steel is a fine example of early automotive design, and is still in running condition today, almost half a century after it was built. It is an antique Cadillac touring car de luxe of the duster and goggles era.

Esso Petroleum Solvents have had the same test of time, and like the Cadillac, have built a fine reputation for superior quality and unfailing dependability. Why not get the highest quality next time you order? Specify Esso Petroleum Solvents for the quality your product deserves.

You can depend on Esso Solvents for

MULTI-STORAGE AVAILABILITY—water terminals in industrial centers.

MODERN HANDLING METHODS—separate tank storage, pumping lines, tank cars and trucks are used in all handling operations. Prompt delivery to your door is assured.

SOLVENCY—Esso aliphatics and Solvesso aromatics cover both high and low solvency ranges.

CONTROLLED EVAPORATION—available in a wide range of evaporation rates with precise characteristics to meet your most exacting requirements.

FOR TECHNICAL ASSISTANCE—If you have a solvents problem or want further information on the specifications and characteristics of Esso Solvents—write or call our office nearest you. Our technicians will be glad to assist you.

ESSO

PETROLEUM SOLVENTS

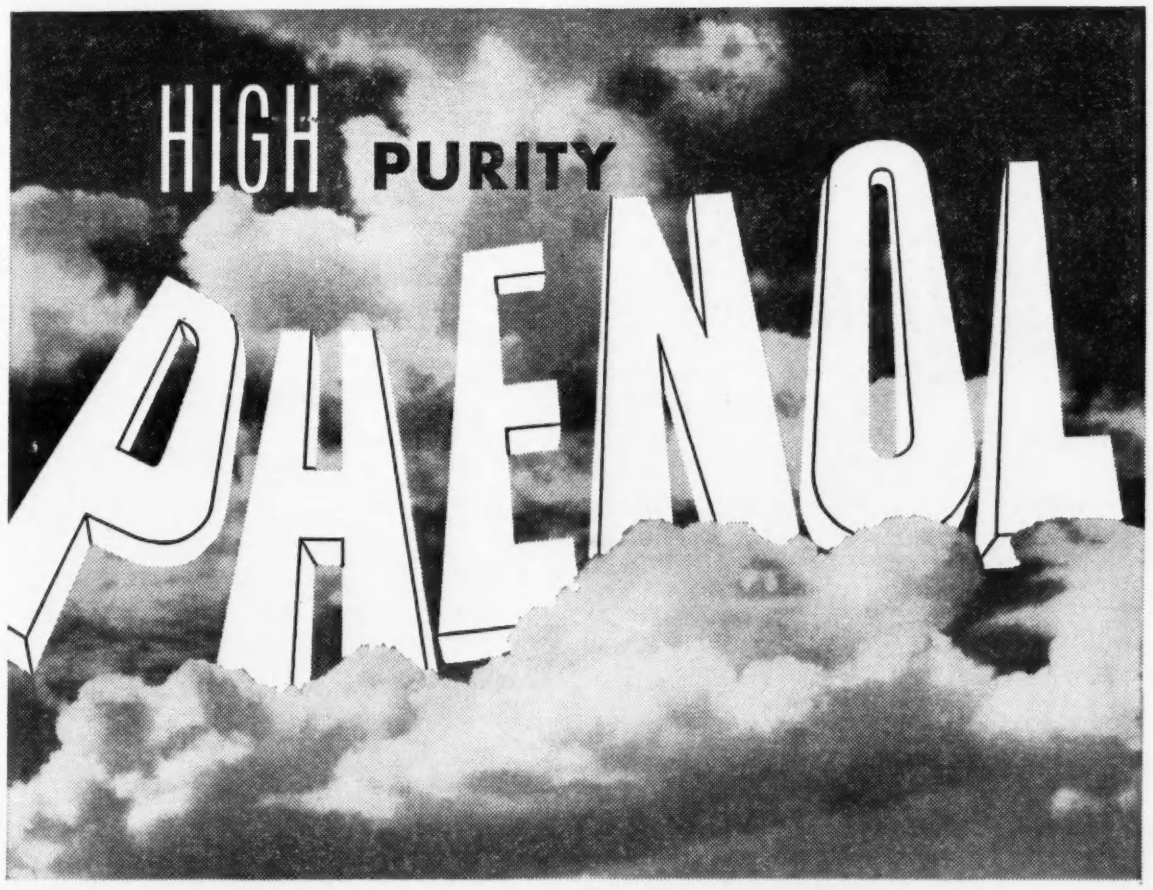
SOLD IN: Me., N. H., Vt., Mass., R. I., Conn., N. Y., N. J., Pa., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY

Boston, Mass. — Pelham, N. Y. — Elizabeth, N. J. — Bala-Cynwyd, Pa. — Baltimore, Md. — Richmond, Va. — Charlotte, N. C. — Columbia, S. C. — Memphis, Tenn. — New Orleans, La.

Parathion, spray powder, 15% dealers, dms., works lb. .50 - .53
tech., dms., c.l., t.l., works lb. 1.3395 -
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paranitroaniline (see p-Nitroaniline).
Paris green, dealer, distributor, dms. c.l., works, frt. alld. on 96 lbs or over lb. .36 - .40
l.c.l., same basis lb. .37 - .53
Passion flower herb, bls lb .20 - .21
Peanut meal, 45%, old process, bgs., mills ton.$8.00 Nom.
Pectin, citrus, NF, powd., bbls lb. 2.05 - 2.06
tech., powd., bbls lb. 1.35 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units. .03½- .04
Procaine bulk 1,000,000 units. .03½- .04
Sodium, sterile, bulk, 1,000,000 units. .03½- .04
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22½- .29
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks, Tex. refy. gal. .14½- —
Pepper, black, Malabar, spot, bgs lb. .39 - —
red, Gondar, spot, bgs lb. .28 - .30
Japanese, hontaka, bgs lb. .33 - .34
birdseyes, bgs., new crop lb. .50 - —
Mombasa, bgs., shipt. lb. .72 - —
Nigerian, bgs lb. .30 - —
Turkish, bgs. lb. .25 - —
white, bgs. lb. .47 - —
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls lb. 1.10 - —
Pepsin NF, 1:3,000 bulk lb. 3.45 - 3.50
Perchloroethylene, dms., c.l., or truckloads, dlvd. E lb. .12½- —
l.c.l., dlvd. E lb. .14 - —
tank trucks, 1,000 gal., min. dlvd. E lb. .11½- —
tanks, dlvd E lb. .11 - —
dlvd. W. lb. .11½- —
Peru balsam, dms lb. 1.50 - 1.75
Petrolatum, amber, dms., c.l., refy. lb. .05¼- .05⅝
l.c.l., dlvd. lb. .07 - .07¼
tanks, refy lb. .03½- .04⅛
cream, dms., c.l., refy lb. .08⅜- .07⅝
l.c.l., dlvd lb. .08⅜- .09
tanks, refy lb. .04⅜- .05⅛
extra amber, dms., c.l., refy lb. .05½- .06⅛
l.c.l., dlvd lb. .07¼- .07½
tanks, refy lb. .03¾- .04⅛
USP, white, lily, dms., c.l., refy. lb. .06⅞- .07½
l.c.l., dlvd lb. .09⅛- .09⅝
tanks, refy lb. .05⅛- .06¼
snow, dms., c.l., refy lb. .07⅝- .08
l.c.l., dlvd lb. .09⅝- .09⅞
tanks, refy lb. .05⅜- .06⅛
soft, dms., c.l., refy lb. .07 - .08
l.c.l., dlvd. lb. .08¾- .09
tanks, refy lb. .05¼- .06⅛
yellow, sott, dms., c.l., refy lb. .05½- .06
l.c.l., dlvd lb. .07⅛- .07⅝
tanks, refy lb. .03¾- .06⅛
Petroleum, tacquer diluent, 150°-240°F., b.r., tanks, West Coast, ex tax, Los Angeles. gal. .169 - .204
East coast, N. J., N. Y. gal. .19 - —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg., tanks, California, ex tax, San Francisco gal. .164 - —
East coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —
odorless, tanks, refy., Watson, Cal gal. .245 - —
Borger, Tex gal. .24 - —
Houston, Tex gal. .24 - —
Wood River, Ill gal. .2625- —
dlvd. N. J gal. .32 - —
dlvd N. Y. gal. .33½- —
tankwagon, N. J., dlvd gal. .36 - —
N. Y., dlvd gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J. and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum sovvent, partial aromatic).
VM&P, 225°-300°F, b.r., tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —
East Coast, N. J., N. Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .205 - —
Chicago gal. .289 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282° F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F. b.r., 43°C. m.a.p., N. J gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., N. J gal. .29 - —
224°-280°F. b.r., 48°C. m.a.p., Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., N. J gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°386°F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-344°F., b.r., 13.5°C. m.a.p., Texas City gal. .33 - —
310°-348°, b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F. b.r., 16°C. m.a.p., N. Y., N. J. gal. .33 - —
324°-349°F., 37°C. m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F, b.r., 30°C. m.a.p., Houston gal. .33 - —
352°-410°F. b.r., 16.5°C. m.a.p., Texas City gal. .33 - —
358°-401°F., b.r., 25°C. m.a.p., N. Y., N. J gal. .39 - —
364°-404°F. b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875- —

Petroleum, solvent, stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 0 gal. .12375- —
Pennsylvania, western gal. .15 - —
Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret., dms., c.l., works lb. .16 - .18¼
l.c.l. works lb. .17 - .18½
tanks, works lb. .14 - .16½
50-55% sulfonic content, non-ret. dms., c.l., works lb. .15½- —
l.c.l., works lb. .16½- —
tanks, works lb. .12½- —
o-Phenetidine, dms., works lb. 1.00 - —
p-Phenetidine, dms., works lb. 1.00 - —
Phenobarbital, USP, dms., 100-lb. lots lb. 3.50 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.50 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. .16¾- —
l.c.l., same basis lb. .17½- —
tanks, same basis lb. .15 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .16¼- —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14½- —
39° or above, tar distilled, non-ret. dms., c.l., same basis, lb. .18¼- —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16½- —
Phenol, USP, syn., dms., c.l., frt. alld. lb. .18¾- —
1,000-lb. lots or more, same basis lb. .19½- —
less than 1,000-lb. lots, same basis lb. .20½- —
tanks, same basis lb. .17 - —
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots. lb. 1.10 - —
smaller lots lb. 1.12 - 1.17
Phenothiazine, NF fib dms., c.s., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs., same basis. lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 4.65
Phenylacetamide, 125-lb dms. works lb. 1.10 - —
smaller dms., works lb. 1.15 - 1.10
dl-Phenylalanine, dms., works lb.27.00 -37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. dms., dlvd. E lb. 3.60 - —
smaller dms., dlvd. E lb. 4.00 - —
Phenyldiethanolamine dms., c.l., dlvd. E lb. .40½- —
l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt. alld. lb. .90 - —
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, tech., refd., dms., works lb. 1.35 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
l.c.l., same basis lb. .76 - —
Phenylethyl acetate, bots lb. 1.30 - —
b-Phenylethylamine, dms., 1,000-lb. lots, works lb. 1.10 - —
smaller lots, works lb 1.15 1.40
Phenylhydrazine base, CP bots lb 3.00 3.07
Hydrochloride coml. kgs., works. lb 1.75 - —
purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb lots, dlvd. E lb. 1.80 - —
smaller lots, dlvd lb. 2.10 - —
Phenylethylphenyl acetate, bots lb 3.95 4.40
o-Phenylphenol, dms. t.c.l., works lb. 42 44
p-Phenylphenol, bgs., c.l., works lb. .35 —
l.c.l., works lb. .39½- —
Phloroglucinol, coml., fib. dms., works lb 6.40 - —
C.P., bots., works lb.17.75 - —
tech., tin dms. works lb.10.45 - —
Phosphate, deflorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton.43.00 - —
Florida, land pebble, run-or-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.75 - —
70-68%, b.p.l., c.l., same basis long-ton 5.15 - —
72-70% b.p.l., c.l., same basis long-ton. 5.81 - —
75-74% b.p.l., c.l., same basis long-ton. 6.81 - —



The Oronite manufacturing process permits the consistent marketing of a highly pure Phenol. Exceeding the U. S. P. congealing point specification of 39.0° C, Oronite's guaranteed minimum is 40.6° C—with actual shipments being regularly higher. This dependable high quality, at competitive prices, suggests Oronite as a leading Phenol source.

Oronite, with complete control of all basic raw materials in its manufacturing process is truly a 100% *basic source* of supply. Thus with Oronite you are assured of a reliable Phenol source, service and product when you need it.

Contact any Oronite office for further product and supply information.

A partial list of Oronite Products

Detergent Alkane	Wetting Agents	Purified Sulfonate	Para-Xylene 95%
Detergent Slurry	Cresylic Acids	Polybutenes	Ortho-Xylene
Detergent D-40	Gas Odorants	Acetone	Xylol
Detergent D-60	Lubricating Oil	Naphthenic Acids	Aliphatic Acid
Dispersant NI-O	Additives	Phthalic Anhydride	Hydroformer Catalyst
Dispersant NI-W	Sodium Sulfonates	Maleic Anhydride	Fuel Oil Additives

Basic Chemicals for Industry

ORONITE CHEMICAL COMPANY

200 Bush Street, San Francisco 20, Calif. • 714 W. Olympic Blvd., Los Angeles 15, Calif.
30 Rockefeller Plaza, New York 20, New York • 20 North Wacker Drive, Chicago 6, Ill.
Mercantile Securities Building, Dallas 1, Texas • Carew Tower, Cincinnati 2, Ohio

3263

Phosphate Rock—Propylene Oxide

Phosphate rock, Florida, landpebble, run-of-mine, washed, dried, unground, bulk, c.i., mines, 78-76%, b.p.l., c.i., same basis long-ton. 7.81 - —

The above prices are based on fuel oil at $2.35 per bbl. and labor at $1.31. Recent 7c. labor advance and 10c. fuel oil advance currently absorbed.

Phosphorus, amorph., red, dms., t.l., works lb. .43 - —
smaller lots, works lb. .44 - .45
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt. equald. lb. .21½ - —
tanks, works, frt. equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Pentasulfide, solid, dms., c.l., works lb. .11½ - —
l.c.l., works lb. .12½ - —
Pentoxide, dms., c.l., works lb. .13½ - —
l.c.l., works lb. .16½ - —
Sesquisulfide, tins, cs., works lb. .29 - —
export dms lb. .31 - .36
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½ - —
Phthalic anhydride, bgs, c.l., works, frt. equald lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19¼ - —
Phthalimide, 97%-98%, dms., works, frt. alld lb. .65 - .70
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —

a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 5° dms., c.l., works, lb. .32½ - —
l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., c.l., works, lb. 2.65 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Nitrate, USP, bots., vials oz. 4.80 - 4.90
Pimento, Jamaican, bgs. lb. .86 - —
Mexican, bgs. lb. .64 - .68
Pink root, bls. lb 3.00 - 3.25
d-Piperazine hexahydrate, French Codex, bots kilo. 8.00 - 8.50
Piperidine, dist., dms. frt. equald. lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E. lo. 4.50 - 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25
Pitch, coaltar, 150°-170°F. m.p., tanks, works ton.37.00 - —
Cottonseed, raw, dms., works lb. .02¼ - .03
Linseed dms lb. .06 Nom.
Marine, dms. lb. .04¼ .05
Petroleum (see Asphalt, petroleum).
Soybean dms., works lb .05 Nom
Tall, dms., works lb. .03¾ - 04¼
Plaster of Paris (see Gypsum).
Platinum metal, works oz.97.00 -99.00
Pleurisy root, bls lb. .45 - .50
Podophyllum resin, NF, dms. lb.14.25 - —
Poke root, bls lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —

Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb. lots, works. lb. .43 - —
smaller lots, works lb. .46 - .48
Poppy seed, Argentine, bgs. lb. No prices.
Dutch, bgs. lb. .24 - .25
Iranian, bgs. lb. .15 - —
Polish, bgs. lb. .23 - —
Turkish, bgs. lb. .23 - .24
Potash, caustic reg., flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs.10 20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9 75 - —
Potassium acetate, NF, dms lb. .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, bgs., c.l., works lb. .16½ - —
l.c.l., works lb. .17 - —
Potassium bichromate in dms ½c. higher.
Bitartrate, NF, dom., gran. or powd., bbls., 5,000 lbs., 1 ship't lb. .36½ - —
dms., c.l. lb. .36 - —
smaller lots lb. .37 - .40
Imp., kgs lb. .27¾ .38
Bromate, dms., 1,000 lbs. or more, lb. .50 - —
25-200-lb. lots lb. .52 - .62
Bromide, USP, gran., bbls., kgs. lb. .36 - —

Potassium carbonate, NF, gram., bbls., dms lb. .20 - —
powd., bbls., dms lb. .21 - .22
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs.10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate, cryst., dms., c.l., works lb. .10¼ - —
l.c.l., works lb. .10½ - .11½
powd., dms., c.l., works lb. .10¾ -
l.c.l., works lb. .11 - .12
export, dms., New York lb. .12¾ - .13½
NF, gran., 25-lb. metal dms lb. .35 - —
Chloride, USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd. dms lb. .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP gran., dms lb. .41 - —
powd., dms lb. .40½ - .41½
Cyanide, dms., 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb. lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate)
Ferricyanide, drums, ton lots lb. .50 - —
Ferrocyanide, bgs., ton lots lb. .22½ - —
smaller lots lb. .23 - —
Fluorobate, fib, dms., c.l., works, lb. .30 - —
l.c.l. works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms. lb. .75 - .79
Guaiacolsulfonate, NF, dms lb 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP pellets 100-lb. dms 1 to 100-dm lots lb. .28½ - .33
Hypophosphite, NF, fib dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms. lb. 1.90 - 1.95
Manure salt, 22% K_2O, base price, unit-ton. .17 - .1765
July forward unit-ton. .38 - —
Metabisulfite, gran. dms lb. .20 - .21
powd. dms lb. .25 - —
Muriate, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-on. .38 - —
bgs., c.l., works, base price ton.26.00 - —
July forward ton.27.20 - —
Nitrate, cryst., bbls., 20-ton lots, 100 lbs.14.40 - —
smaller lots 100 lbs.14.65 -14.90
gran., bbls., 20-ton lots.100 lbs. 9.75 - —
smaller lots 100 lbs.11.10 -11.50
powd., bbls., 20-ton lots.100 lbs.10.75 - —
smaller lots 100 lbs.12.00 -12.50
USP, gran., dms. lb. .18 - —
Potassium nitrate in bags, 50c. per 100 lbs. less in kegs, $1 more
Oxalate, neutral, tech., fine gran., bbls., dms. lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton.191.50 - —
dms., ton lots, ex whs ton.198.00 - —
smaller lots, ex whse ton.302.50 - —
Powdered Potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .17½ - —
l.c.l., works lb. .18 - .19
Permanganate, coml., dms., works, lb. .23½ - .26¼
USP, dms., works lb. .26½ - .28
Persulfate, dms. 5-ton lots, works, lb. .18 - —
1-ton lots, works lb. .20 - —
Phosphate, tetrabasic, bbls., works, lb. .16½ - .18½
Prussiate, red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass, bgs., c.l., works 100 lbs.17.00 -17.30
l.c.l. lots lbs 17 80 —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms. or more, works 100 lbs. 6.55 - 6.95
tanks, works 100 lbs 5.45 - —
electrical grade, 29° Be, 1:2.0 dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.20 - 7.60
Silicofluoride, bbls., works lb. .099 - .1040
Stannate, dms., frt. alld E lb. .693 - .759
Sulfate, agricultural, 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII cryst., dms lb. .31 - .33
gran. dms lb. .18½ - —
powder dms lb. .16½ - .17
Sulfocyanate, NF, cryst. (see Potassium thiocyanide).
Thiocyanate, NF, cryst., dms lb. .84 - .94
tech., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .14 - —
5-ton lots, works lb. .14½ - —
1-ton lot or less works lb. .14¾ - —
Toluene sulfonate, dms., c.l. or tl. works lb. .42 - —
l.c.l. works lb. .46 - —
Potassium-magnesium sulfate, bulk, works basis 40% K_2SO_4, 18% MgO, base price ton.13.45 - —
July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran., powd., dms., c.l lb. .36½ - —
5,000-lb. lots lb. .37 - —
smaller lots lb. .37½ - .42½
Potassium-titanium fluoride, fib, dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb. .50 - —
l.c.l., works lb. .52½ - .55
Pregnenolone, bots gram. .45 - —
Acetate, bots gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.90 - —
100-lb. lots lb. 3.00 - 3.60
Progesterone, USP, bots., 100 gram lots gram. .50 - —
Acetate, bots gram. .70 - —
Propane, indust., tanks, group 3, gal. .03½ - —
N. Y. Harbor gal. .06 - —
n-Propyl acetate, dms., c.l., dlvd lb. .12¾ - —
l.c.l., dlvd lb. .13¾ - —
tanks, dlvd lb. .1075 - —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 - 4.40
p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo.55.00 - —
smaller lots kilo.55.10 -55.30
Propylene dichloride, dms., c.l., dlvd. E lb. .0825 - —
l.c.l., same basis lb. .095 - —
tanks, same basis lb .07 - —
Prices in West 1c. higher dlvd., on same basis.
Glycol, indust., dms., c.l., dlvd. E lb. .15½ - —
l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .13½ - —
USP, dms., c.l., dlvd. E lb. .17½ - —
l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .15½ - —
Methyl ether, dms., c.l., dlvd. lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —
Oxide, dms., c.l., dlvd. E lb. .17½ - —
l.c.l., dlvd. E lb. .18½ - —
tanks, dlvd. E. lb. .15½ - —

What's in prospect for petroleum?

While not as much in evidence here as the gasoline, there are many other important products of petroleum in this picture.

Today, few processes are as prolific as petroleum refining. In addition to new high-octane fuels and improved lubricants, many new plastics, paints, dyestuffs, detergents, and drugs owe their origin to a refinery. And, as the list grows longer, so grow the requirements of one of the nation's largest chemical-consuming industries.

To anticipate and provide for the diverse chemical requirements of the petroleum industry, Olin Mathieson offers a unique program of *coordinated planning and production*. This assures refiners and processors of the availability of chemical raw materials regardless of changing market conditions, new product developments, or requirements for plant expansions.

At present, a growing number of chemical consumers are coordinating their planning and production with Olin Mathieson . . . America's prime producer of basic industrial chemicals. Olin Mathieson's long experience and familiarity with the broad market picture will prove invaluable in *your* planning. Why not consult with us . . . now?

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

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MATHIESON
INORGANIC CHEMICALS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Soda • Chlorine • Hydrazine and Derivatives • Nitric Acid • Hypochlorite Products • Nitrate of Soda • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid
ORGANIC CHEMICALS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol • Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Trichlorobenzene

Psyllium seed, black, bgs. ..... lb. .55 - —
blonde, bgs. ..... lb. .18 - —
husks, bgs. ..... lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
smaller lots ..... lb. .03⅞- .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs. ton lots lb. .02½- .04
fine, bgs., ton lots ..... lb. .02½- .04
Pumpkin seed, bgs ..... lb. .25 - .26
Pyrethrin, syn., (see Allethrin)
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
powd., 1.3% pyrethrins, bbls., works lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.35 - 8.55
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal. 41.75 - 42.75
oleoresin, dewaxed, 20%, dms., works lb. 9.80 - 9.90
purif., 20% dms., works ..... lb. 10.00 - 10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 - —
l.c.l., same basis gal. 2.80 - —
refd., 2°, non-ret dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .46 - —
Pyrites, Canadian works long-ton. 3.00 - 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF, dms. ..... lb. 3.27 - 3.30
Pyroxylin, scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms. works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 - —
white, china, ivory, dms., works lb. .16 - —
dense, opaque, dms., works, lb. .12 - .15
translucent pastels, cs., works, lb. .14 - —
transparent colorless, dms., works lb. .25 - —
colors, dms., works ..... lb. .15 - —
USP, bots ..... lb. 9.50 - —

Q

Quassia chips ..... lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin bgs. c.l., lb. .16½- .16¾
liq., 35% tannin, bbls., works, lb. .08¼- —
Quebracho extract, solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64- —
ord. 63% tannin, bgs., c.l., same basis lb. 11 21/32- —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
liq., No. 1, bbls. l.c.l lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulfate, USP, cns., 100-oz. lots. oz. .37½- —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½- —
Hydrobromide, NF, cns., 50-oz. cns. oz. .47½- —
Sulfate, USP, cns., 100-oz. lots oz. .42 - —
Quinine and Urea hydrochloride, NF, cns oz. .56 - —
Quinoline, dms., c.l., frt. equald. lb. .50¾- —
l.c.l., same basis ..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
powd., frt. alld. 100% basis lb. .98 - —
Rauwolfia serpentina, root, powd., bbls. dms lb. 2.00 - 3.00
Red, BON acid maroons, pure, bbls., lb. 1.75 - —
resinated, bbls lb. 1.50 - —
arylid, deep shades, bbls. lb. 8.60 - —
light shades, bbls ..... lb. 2.75 - —
maroon bbls lb. 3.60 - 5.90
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade, bbls., same basis, lb. 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls, same basis lb. 3.95 - —
orange red, bbls., same basis, lb. 1.81 - —
Lithopone light red shades, bbls., same basis lb. 2.01 - 2.16
medium light red shades, bbls., same basis lb. 2.19 - —
medium red shade, bbls., same basis lb. 2.37 - 2.52
dark red shade, bbls., same basis lb. 2.57 - 2.82
maroon shade, bbls., same basis lb. 2.82 - 3.03
dark maroon shade, bbls., same basis lb. 3.02 - —
Red cadmium lithopone all shades, in smaller pkgs., 5c per lb higher; all prices are 1c per lb higher ex whse. Los Angeles and San Francisco
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar)
Eosin toner, bbls, works lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .12¾- —
Iron oxide, nat., 75-85% ferric oxide, bgs. l.c.l. Bethlehem, Pa., Copley, O., Easton, Pa., East St. Louis lb. .04 - .07½
syn. 98% terric oxide, bgs., c.l., works lb. .12¾- —
l.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb. 1.10 - 1.20
Lithol toner, bbls., works ..... lb. .85 - —
rubine toner, pure, bbls., works, lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type, bbls., works lb. 1.40 - —
Maroon toner, MNPT, kgs., c.l., works lb. 3.60 - —
10,000-lb lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works ..... lb. .02½- —
l.c.l., works lb. .02¾- —
Naphthol ITR bbls. works lb. 5.25 - —
Oxide (see Red iron oxide)
Persian Gulf, bgs., c.l., works lb. .06¾- —
l.c.l works lb. .07 - —
Para, toner, bbls. ..... lb. 1.05 - —
chlorinated, kgs ..... lb. 1.10 - 1.15
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.35 - —
tungstated, PTMA, works, kegs. lb. 6.15 - —
Spanish oxide, bbls., c.l., ex dock, lb. .05¾- —
l.c.l., ex dock ..... lb. .06 - —
ex whse., New York lb. .06½- —

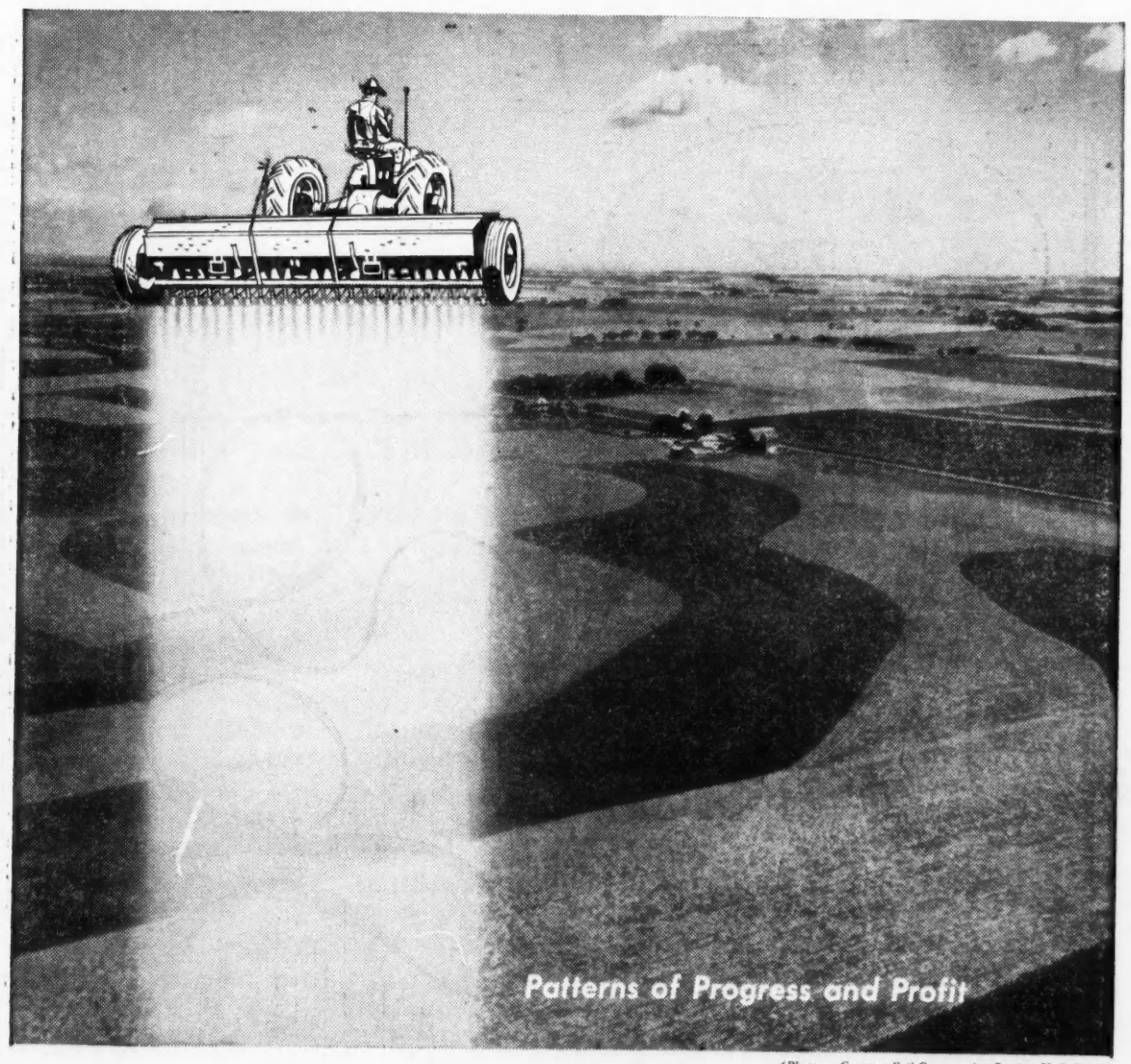
Red, toluidine toner, deep shades, kgs., works lb. 1.60 - —
light shades, kgs., works lb. 1.60 - —
Turkey, bbls., works ..... lb. .62 - —
Tuscan, bbls., frt. equald ..... lb. .24½- .25
Venetian, 15%, bgs., works ..... lb. .0350- .0037
20%, bgs., works ..... lb. .0475- —
25%, bgs., works ..... lb. .0525- —
30%, bgs., works ..... lb. .0550- —
35%, bgs., works ..... lb. .0575- —
40%, bgs., works ..... lb. .0625- —
Watchung-type, bbls ..... lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red).
Red saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots ..... gram. 10.00 - —
Resorcinol, tech. grade, dms., c.l., works lb. .77½- —
l.c.l., works ..... lb. .78½- —
Monoacetate, NF, dms ..... lb. 3.00 - 3.25
Rhatany root, bgs ..... lb. .15 - .16
Rhodinol, 5-lb. cans ..... lb. 25.50 - 34.00
Rhubarb root, India, whole, bgs lb. 1.75 Nom.
powd., bbls ..... lb. 2.50 Nom.
Riboflavin, USP, bots., dlvd. kilo. 80.00 - —
readily soluble, bots., dlvd kilo. 130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 140.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, 100% basis lb. 10.00 - —
resin, 25-45%, fib, dms., works, 30% basis lb. 3.00 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03 - —
ton lots, same basis ..... lb. .04 - —
Rutin, NF, fib dms, 25-kilo lots, kilo. 17.50 - 18.50
10 to 25-kilo lots ..... kilo. 17.50 - 20.00
1 to 10-kilo lots ..... kilo. 18.90 - 20.00
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
l.c.l., same basis ..... lb. .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - .49¼
activated, ground with lime, bbls lb. .30 - .32
Saccharin, USP, cryst., soluble, dms., 1000-lb. lots lb. 1.60 - —
smaller lots ..... lb. 1.70 - 1.80
works lb. .77½- —
l.c.l., works ..... lb. .78½- —
USP, cryst., dms., works ..... lb. 2.75 - —
powd., dms., works ..... lb. 2.95 - —
powd., soluble, insoluble, dms., 1000-lb lots lb 1.65 - —
smaller lots ..... lb. 1.75 - 1.95
Saffron, Spanish, USP, tins ..... lb. 35.00 - 40.00
Safrol, dms ..... lb. 1.60 - —
Sage, Cretan, bgs ..... lb. .11 - —
Dalmatian, bgs. ..... lb. .44½- —
Italian ..... lb. .22½- —
Sago flour, raw, bgs ..... lb. .06¾- .07
refd., bgs ..... lb. .08½- .08¾
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms ..... lb. 1.00 - —
Salol, NF, gran., bbls., kgs ... lb. 1.15 - —
Powdered salol, 25c higher
Salt rock, paper bgs., c.l. ... 100 lbs. 1.01 - —
table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.19 - —
Saltcake, dom., bulk works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies, chips bgs. .65 - .66
powd., fib. dms ..... lb. .75 - .76

Psyllium Seed—Shellac, Bleached

Sarsaparilla root, imp., Honduras, bls lb. .58 - .62
Mexican, bls. ..... lb. .58 - .62
Sassafras root bark, ord., bls lb .45 - —
select, bbls. lb. .65 - —
Schaeffer's salt, paste, dms, frt. alld. 100% basis lb .95 - —
powd. bgs., frt. alld., 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 17.40 - —
Seidlitz mixture, bbls. 5,000-lb. lots lb .30½ —
smaller lots lb 31 .32
Selenium, powd., dms., dlvd ..... 9.00 - 10.50
Senega root, bls lb 2.35 - —
Senna leaves, Alex., whole and half, bls lb .19 - —
siftings lb .17 - —
Tinnevelly, No. 1, bls ..... lb .16 - .18
No. 2, bls ..... lb .13 - .15
No. 3, bls. ..... lb .11 - .13
powdered, bbls., bxs ..... lb .18 - —
pods, bls. ..... lb .14 - —
Serpentaria root, bls ..... lb 4.95 - —
Sesame seed, Egyptian, nat ..... lb. .16¾- —
hulled lb. .21 - —
Nicaragua, huller, shipt., bgs lb. .27 - —
nat., bgs. ..... lb. No prices.
Salvadorian, natural ..... lb. .17½- —
Syrian, bgs., natural ..... lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .58 - —
bbls., 1,500-lb lots ..... lb. .60 - —
kgs. 1,500-lb. lots ..... lb. .61 - —
refd., bgs., 1,500-lb lots ..... lb. .66 - —
bbls., 1,500-lb. lots ..... lb. .68 - —
kgs., 1,500-lb. lots ..... lb. .69 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.



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Shellac, Lemon No. 1—Sodium Phosphate, Tribasic, Anhyd.

Shellac, lemon No. 1, bgs., 10-bg. lots, lb. .57 - .58
No. 2, bgs., 10-bg. lots lb. .56 - .57
Superfine, bgs., 10-bg. lots lb. .51 - .52
TN, bgs., 10-bg. lots lb. .50 - .51
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton 25.00 - —
l.c.l., works, exwnse ton 45.00 - 55.00
hard-quartz, 99½, 325 mesh, bgs, c.l., works ton 20.00 - —
l.c.l., works ton 25.00 - 30.00
140 mesh, bgs., c.l., works ton 15.00 - —
l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs. Troy oz. .91⅛- —
Cyanide, fib. dms., 2,500-oz. lots, oz. .82⅜- —
1,000-oz. lots oz. .82¾- —
500-oz. lots oz. .82⅞- —
100-oz. lots oz. .83⅛- —
Nitrate, CP, cryst., bots., 2,500-oz. lots oz. .58⅝- —
1,000-oz. lots oz. .60⅛- —
500-oz. lots oz. .60⅜- —
250-oz. lots oz. .60⅞- —
USP granular silver nitrate 4c. per oz. higher.
Proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.05 - —
strong, NF, bots., dms., 1,000-oz. lots oz. 1.00 - —
Soapbark, whole, bls. lb. .45 - —
crushed, bls., bbls. lb. .55 - —
powd., bbls. lb. .55 - —

Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.80 - —
l.c.l., stock points 100 lbs. 2.90 - 4.67
bbls., c.l., works 100 lbs. 2.40 - —
l.c.l., stock points 100 lbs. 3.55 - 4.22
bulk, c.l., works 100 lbs. 1.50 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.75 - —
l.c.l., stock points 100 lbs. 3.85 - 4.62
bbls., c.l., works 100 lbs. 2.30 - —
l.c.l., stock points 100 lbs. 3.35 - 5.62
bulk, c.l., works 100 lbs. 1.45 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 4.50 - —
l.c.l., stock points 100 lbs. 5.60 - —
liq., 50%, sellers, tanks, works, dry basis 100 lbs. 2.80 - —
rayon type, sellers' tanks, works, dry basis 100 lbs. 2.80 - —
70%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
rayon-type, sellers tanks, works, dry basis 100 lbs. 2.90 - —
solid, 76%, dms., c.l., works, 100 lbs. 4.10 - —
l.c.l., stock points 100 lbs. 5.30 - —
Sal., conc., bgs., c.l., works 100 lbs. 2.30 - —
smaller lots, works 100 lbs. 2.60 - —
Sodium acetate, anhyd., bgs., c.l., works lb. .12 - —
dms., c.l., works lb. .12¾- —
NF, 60%, gran., dms., c.l., works lb. .12½- —
l.c.l., works lb. .14 - —
Alginate, NF, white powd., dms., ton lots, works lb. .87 - 1.30
refd., bbls., works lb. .83 - —
p-Aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 - —
smaller lots lb 2.45 - 2.50

Sodium p-aminosalicylate, dms., 1,000-lb. lots or more, frt. adjusted lb. 3.75 - —
smaller lots, same basis lb. 3.80 - 4.25
Antimoniate, bbls., c.l., dlvd E. lb. .28 - —
l.c.l., dlvd. E lb. .29½- —
Arsenate, dms., c.l., works lb. .12½- —
l.c.l., works lb. .13¾- .14¾
Arsenite, dms., c.l., works lb. .12¼- —
l.c.l., works lb. .13 - .14½
soln., dms., works gal. .59 - .67
Ascorbate, dms., 25-50 kilo lots kilo 16.00 - —
10-kilo lots kilo 16.35 - —
5-kilo lots kilo 16.75 - —
1-kilo lots kilo 17.00 - —
bots, 500-gram lots kilo 17.50 - —
Benzoate, tech., bbls., dms., 100-lb lots or more lb. .39 - —
USP, bbls., dms., 100-lb. lots, or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.80 - —
l.c.l., works 100 lbs. 3.55 - —
powd., bgs., c.l., works 100 lbs. 2.40 - —
l.c.l., works 100 lbs. 3.15 - —
Bichromate, bgs., c.l., works lb. .12¼- —
l.c.l., works lb. .12¾- .13¾
Bifluoride, bbls., c.l., works, frt. equaled lb. .17½- —
l.c.l., same basis lb. .1790- —
Bisulfate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - —
soln., 35°, bbls., c.l., works, 100 lbs. 1.55 - —
l.c.l., works 100 lbs. 2.05 - —

Sodium borate (see Borax).
Bromide, USP, bbls., works lb. .36 - —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated (see Soda, sal), monohydrated bgs., c.l., works 100 lbs. 3.00 - —
l.c.l., works 100 lbs. 3.40 - —
Chlorate, cryst., dms., c.l., works, lb. .09 - —
l.c.l., works lb. .10½- .11¼
Chloride, tech. (see Salt).
USP, bgs. lb. .05 - .12
Chlorite, tech., dms., c.l., works, lb. .58 - —
20-ton lots or more, works, lb. .66 - —
smaller lots, works lb. .70 - .73
Chloroacetate, tech., dms., c.l., works lb. .27 - —
l.c.l., works lb. .28 - —
Chromate, dms., c.l., works lb. .13¼- —
l.c.l., same basis lb. .13¾- .15
Citrate, anhyd., dms. lb. .60 - .65
NF VIII, gran., dms lb. .26 - .30⅛
USP XVI gran. dms lb. .29½- .34
Sodium citrate, USP, powd. prices ½c. higher.
Cyanate, dms., 1,000-lb. lots, works lb. .85 - 1.10
smaller lots works lb 1.00 - 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots lb. .178 - —
over 1,000-lb. lots lb. .188 - —
100-lb to 1,000-lb. lots lb .198 - —
Granular sodium cyanide 1c higher
Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 - —
l.c.l., works lb. .14¾ - —
anhyd., dms., c.l., works lb. .17 - —
l.c.l., works lb. 17¾- —
Dichromate (see Sodium bichromate).
Ferrocyanide, bgs., 10-ton lots, lb. .13½- —
smaller lots lb. .14 - —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1250- —
l.c.l. works lb. 1290- —
Formate, bgs., c.l., works lb. 7.60 - —
l.c.l. works 100 lbs 8.65 - —
Gentisate, 100-lb. fib. dms lb. 8.50 - —
Gluconate, refd., dms lb. .80 - .83
tech., dms lb. .35 - —
Glutamate, mono-, dms., c.l lb. 1.55 - —
Hydride, dms., works lb. 1.40 - 3.00
Hydrosulfide (see Sodium sulfhydrate).
Hydrosulfite, dms., c.l., frt. alld. lb. .22 - —
l.c.l., frt. alld lb. .22½- —
Hydroxide, tech. (see soda caustic).
NF pellets 100-lb dms. 1 to 100-dm. lots lb. .18½- .23
Hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, USP (see Sodium thiosulfate).
pea crystals, bgs. 100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
photo grade, bgs., c.l., works, 100 lbs. 4.50 - 4.75
l.c.l. works 100 lbs. 5.00 - 5.05
tech., bgs., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90
Sodium hyposulfite crystals in bbls., 50c. higher.
Iodide, USP, bots., dms lb. 2.55 - 2.62
Lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys., dms., works lb. .26½- —
tech., 50%, cbys., dms., works, lb. 16¼- —
Lauryl sulfate, dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. 20 - —
Metabisulfite (see Sodium bisulfite)
Metaborate, octahydrate, gran., bgs., c.l., works ton 85.00 - —
l.c.l., ex whse ton 135.50 - 140.50
Sodium metaborate, octahydrate in bbls., $24.50 per ton higher
Tetrahydrate, bbls., c.l., works, ton 199.50 - —
Metallic, bricks, 14,000-lb. lots or more, works lb. .17 - .19
less than 14,000-lb. lots, works, lb. .173 - .193
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.10 - —
l.c.l., works 100 lbs. 5.45 - 7.35
dms., c.l. 100 lbs. 5.50 - —
l.c.l. 100 lbs. 5.85 - 7.75
Pentahydrate, bgs., c.l., works, 100 lbs. 4.10 - —
l.c.l., works 100 lbs. 4.45 - 6.35
dms., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 5.10 - 5.85
Molybdate, bbls., cbys., works lb. .85 - .95
anhd., cryst., dms., works lb. .70 - —
powd., dms., works lb. .85 - .92
Monohydrate (see Sodium carbonate monohydrated).
Naphthionate, bbls lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works ton 47.00 - —
bulk, c.l., works ton 43.50 - —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton 51.25 - —
bulk, c.l., same basis ton 47.75 - —
Nitrite, USP, bbls., c.l., works, frt. equaled lb. .08 - —
l.c.l., same basis lb. .09½- —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.00 - 6.30
l.c.l., works 100 lbs. 6.35 - 6.95
hydrated, flake, bbls., c.l., works, 100 lbs. 5.25 - —
l.c.l., works 100 lbs. 7.00 - —
Oxalate, 88%, bgs., works 100 lbs. 10.85 - —
Para-aminobenzoate (see sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate),
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .25½- —
l.c.l., same basis lb. .26½- .28¼
pellets, bgs., c.l. same basis lb. .25 - —
l.c.l., same basis lb. .26 - .28
powd., bgs., dms., c.l., same basis lb. .24 - —
l.c.l., same basis lb. .25½- .32
Pentachlorophenate, 20,000 lbs. min. truckloads, ¼c. per lb. over carlot prices.
Perborate, NF, tech., bgs., c.l., works lb. .173 - —
l.c.l., works lb. .178 - —
Peroxide, dms., c.l., dlvd. E. of Miss. lb. .1860- —
l.c.l. same basis lb. .1910- .1960
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.45 - —
l.c.l., works 100 lbs. 7.85 - —
USP, dried powd., bgs., dms., works lb. .19 - .20⅛
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.90 - —
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.20 - —
l.c.l., frt. equald 100 lbs. 7.60 - —
tribasic, anhyd., bgs., c.l., l.c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equaid 100 lbs. 8.85 - —

THIS MAN IS MAKING
HIS REPUTATION . . .

DOW

HAVE YOU CHECKED THE SAVINGS
YOU MIGHT GET WITH 73%?

The gentleman above has just been struck by an idea. It may very well save his company an appreciable amount of money. The thought: Dow caustic soda in 73% solution is probably *his* best buy, too.

If someone in *your* organization hasn't checked the changed caustic picture lately, you may be missing this chance to save. Hundreds of caustic users *have* discovered the new economy of Dow's 73%. Why an economy? Because today's *increased freight rates* more than cancel out the narrow price difference between 50% and 73%.

A second point of savings, particularly for greater volume users, is the *unloading operation*. Many man-hours are saved because 73% unloads in the same amount of time as a car containing a lower concentration.

A Dow Technical Service man can give you an accurate picture of the savings you could realize with 73%. And don't rule out 73% even if you're now on solid or flake. The pertinent, factual information you get so easily is one of the advantages of dealing with Dow. THE DOW CHEMICAL COMPANY, Midland, Michigan, Dept. AL392A-1

you can depend on DOW CHEMICALS DOW

Transformer Oil must stay water-free

—so shippers equip their drums with Tri-Sure® Closures

REMOVE GRIP TAB AND TEAR
CAUTION
BEFORE SIGNING TRANSPORTATION
RECEIPT HAVE ANY DAMAGE OR
SHORTAGE NOTED ON FREIGHT BILL
STORE DRUMS ON SIDE IN A DRY
PLACE WITH BUNGS ABOUT MIDWAY
ON HEAD OF DRUM
TEST OIL FOR DIELECTRIC STRENGTH
BEFORE PLACING IN APPARATUS IT IS
RECOMMENDED THAT OIL BE TRANS
FERRED TO APPARATUS THROUGH A
FILTER PRESS
U.S. & FOREIGN PATS. PEND. Tab Seal

Water in transformer oil is dangerous. It is essential that every drum of transformer oil be *securely sealed* against leakage or breathing-in.

Most fillers and shippers of transformer oil make it standard policy to equip their drums with *Tri-Sure* Closures* – because experience has proved that the Tri-Sure Seal, Plug and Flange, beside providing the most dependable protection against outward leakage, provide equal protection against the intake of moisture and other contaminating material.

When the Tri-Sure Seal, with its flowed-in gasket, is properly crimped over the gasketed Tri-Sure Plug and Flange, it makes a perfectly leak-proof engagement which averts any possibility of moisture or impurities reaching the contents of the container.

The experience of shippers shows that – even after long exposure to adverse conditions – the contents of Tri-Sure equipped drums remain in their original state.

Whether you ship transformer oil, or any other oil or chemical, if your product needs unfailing protection from leakage and contamination, you can depend on Tri-Sure Closures. *Specify them* when you order drums.

**The "Tri-Sure" Trademark is a mark of reliability backed by over 35 years serving industry. It tells your customers that genuine Tri-Sure Flanges (inserted with genuine Tri-Sure dies), Plugs and Seals have been used.*

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.

Tri-Sure Products Limited, St. Catharines, Ontario, Canada
Tri-Sure S/A Indústria e Comércio, Sao Paulo, Brazil
B. Van Leer N. V., Stadhouderskade 6, Amsterdam, Holland
Van Leer Industries, Ltd., Seymour House, 17 Waterloo Place, Pall Mall S.W. 1, London, England

Always specify Tri-Sure Reg. U.S. Pat. Off. CLOSURES

Sodium Phosphate, Tribasic, Cryst.—Sulfathiazole-Sodium

Sodium phosphate, tribasic, cryst., bgs., c.l., t.l., frt. equald..100 lbs. 4.20 - —
l.c.l., frt. equald ..100 lbs. 4.60 - —

Sodium phosphates in dms., 60c. higher than bgs.

Prussiate, yellow (see sodium ferrocyanide)

Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.10.60 - —

Ferric, dms., 1,500-lb. lots, works lb. .38½- —
smaller lots, works ..... lb. .41½- .43½

tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.37½- —
l.c.l., frt. equald ...100 lbs. 7.77½- —

Salicylate, USP, dms..... lb. .71 - .74

Sesquicarbonate, bgs., c.l., works, 100 lbs. 2.25 - —
l.c.l., dlvd., zone 1....100 lbs. 4.00 - 4.25
zone 2.....100 lbs. 4.25 - 4.50
zone 3.....100 lbs. 4.65 - 4.80
zone 4.....100 lbs. 5.25 - 5.50

Sales zones are: (1) All States E. of Miss. R. and N. of south bound. of Ky. and Va.; Ala., La., and Miss., south of 31° Tex E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia. and St. Louis; (2) Ark. E of 98° Ga.; Iowa (except Davenport), Minn.; Mo (except St. Louis), Neb., E of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W of 98°; N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo., and El Paso, Tex.

Sodium sesquisilicate, hydrated, bgs., c.l., works..100 lbs. 4.60 - —
l.c.l., works .....100 lbs. 4.95 - 5.35
dms., c.l., works.....100 lbs. 5.00 - —
l.c.l., works.....100 lbs. 6.95 - 7.20

Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works...100 lbs. 1.70 - 2.20
tanks, works .. 100 lbs. 1.00 - —
47° Be, turbid, 1:2.9, dms., c.l., works. 100 lbs. 1.95 - —
l.c.l., dms., works. 100 lbs. 2.55 - 2.80
tanks, works .... 100 lbs. 1.60 - —
52° Be, turbid, 1:2.4, dms., c.l., works...100 lbs. 2.30 - —
l.c.l., works....100 lbs. 2.65 - 3.15
tanks, works....100 lbs. 1.95 - —
solid, 1:3.2, bgs., works ton.57.50 - —

Silicofluoride, bgs., c.l., works.lb. .075 - —
l.c.l., works..... lb. .079 - —

Sodium silicofluoride in dms., 4/10c higher

Stannate, dms., works, frt. alld. E lb. .562 - .616

Sulfa drugs (see Sulfa name).

Sulfanilate, bbls., works..... lb. .22 - —

Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd., E ton.52.00 - —
detergent grade, bgs., c.l., works ton.34.00 - —
rayon grade, bgs., c.l., works. ton.31.00 - —

USP, cryst. fib. dms ..... lb. .17¼- .18
gran., fib. dms ..... lb. .17¼- .18

Sodium sulfide, flake, dms., c.l., works, E., frt. equald..lb. .05¼- —
l.c.l., same basis ... lb. .05¾- —
fused, bbls., c.l., works, E., frt. equald lb. .04¾- —
l.c.l., same basis ... lb. .05¼- —
Sulfite, anhyd., bgs., c.l...100 lbs. 3.00 - —
l.c.l., same basis ..... 100 lbs. 3.50 - —
powd., bbls., c.l., works..100 lbs. 7.25 - —
l.c.l., works..... 100 lbs. 7.50 - —

Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06½- —
l.c.l., works..... lb. .07 - —
liq., 40-44%, tanks, works, 100% basis ..ton.115.00 - —

Sulfocyanide, CP (see Sodium thiocyanate).

Tetraborate (see Borax).

Tetrasulfide, liq., 40%, dms., c.l., works..lb. .03½- —
l.c.l., works ..... lb. .04 - —

Thiocyanate, CP, dms ..... lb. .55 - .65
tech., anhyd., 1 ton lots or more, works. lb. .317 - —
less than ton lot, works. lb. .337 - —

Thiosulfate, NF, cryst., bbls lb. .12½- —
tech (see Sodium hyposulphite).

Titanate, cns., c.l., works.....lb. .10½- —
5-ton lots, works .....lb. .10¾- —
1-ton or less, works.....lb. .11 - —

Toluene sulfonate, dms., c.l., or t.l.. lb. .38 - —
l.c.l. ..... lb. .42 - —

Trichloracetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
l.c.l., frt. adjusted, E lb. .39½- —
50 lb. dms., c.l., frt. alld E. lb. .38 - —
l.c.l., frt. adjusted E .. lb. .40 - —
10-lb. cns., c.l., frt. alld. E. lb. .44 - —
l.c.l., frt. adjusted E.....lb. .46 - —

Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald..100 lbs. 7.72½- —
l.c.l., same basis.....100 lbs. 8.12½- —
Trisilicate, powd., 1:3.2, bgs., c.l., works..100 lbs. 8.65 - —
l.c.l., works .....100 lbs. 9.40 - 9.80
dms., c.l., works.....100 lbs. 9.05 - —
l.c.l., works .....100 lbs. 9.80 -10.20

Tungstate, tech., kgs., dlvd. E lb. 1.80 - —

Sodium-ammonium phosphate, bbls., works, frt. equald. lb. .23 - —

Sodium-carboxymethyl cellulose (see CMC).

Sodium-cinchophen (see Cinchophen-sodium).

Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
l.c.l., same basis lb. .21½- —

Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots, same basis lb .30 - —

Solvent naphtha, coaltar, high flash, tanks, works gal. .31 - .35
petroleum (see Petroleum solvent, partial aromatic).

Sorbitan monostearate, fib. dm... 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots, works o. .37 - .39

Tristearate, fib. dms., 20,000-lb. lots works lb. .33 - —
10,000 to 20,000-lb. lots, works, lb. .35 - —
smaller lots works lb .38 - .40

Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works lb. .25 - .26
powd., dms., 1- to 5-ton lots, works. lb. .38 - .39
soln., coml., aqueous, dms., c.l., works lb. .24¼- —
ton lots works o. .25 - —
smaller lots, works lb. .25¼- —
tanks, works lb .23¼- —
reg., 70%, aqueous, dms., c.l., works lb. .16 - —
ton lots works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb. .15 - —

Soybean meal, 44%, bulk, Decatur ton.49.50 - —
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., c.l., works lb. .06 - —

Sparteine sulfate, cns..... oz. .80 - .85

Spearmint leaves, dom., bls lb. .75 - —

Spruce extract, liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works. lb. .05¼- —
l.c.l., works ..... lb. .05½- —

Squill, white, bls .....lb. .17 - .19
powd., bbls. bxs ..... lb. .18 - .21

St. John's bread, edible, bls... lb. .13 - .15

Stannic chloride, anhyd., dms., works lb. .776 - .786
Oxide, dms., dlvd. E ..... lb. .98 - .99

Stannous chloride, anhyd., dms., works lb. .836 - 1.055
Hydrous, cryst., dms., works. lb. .78½- .79¼
Sulfate, dms., works..... lb. .953 - .973

Starch, corn, pearl, paper bgs., c.l. 100 lbs. 7.13 - —
l.c.l. .....100 lbs. 7.28 - —
powd., paper bgs., c.l....100 lbs. 7.25 - —
l.c.l. .....100 lbs. 7.40 - —
Prices for corn starch in cotton bags, 25c. per 100 lbs. higher.

Potato, dom., Idaho, bgs., c.l., works lb. .03¾- —
Maine, bgs., c.l., works lb. .05½- .056½
ex whse, N. Y..... lb. .08 - .08¼
Rice, bgs., l.c.l. ..... lb. .15½- .16
Wheat, bgs lb .0755- .0780

Star root (see Helonias root).

Stargrass Root (see Aletris root).

Stavesacre seed, bgs ..... lb. .60 - .61

Stearine oleo (see Oleostearine).

Stomach substance, not USP, 100-lb. fib. dms lb. 2.80 - —

Stramonium leaves, bgs lb. .18 - .20

Streptomycin hydrochloride, bulk, gram. .063 - .07

Strontium bromide, NF, cns., dms. lb. .75 - .84
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works.....lb. .37 - —
tech., dms., works.....lb. .19 - —
Chromate, bbls., works.....lb. .46 - —
Iodide, jars, 25-lb. lots.....lb. 3.42 - —
Nitrate, bbls., c.l., works 100 lbs.11.00 - —
l.c.l., works ..... 100 lbs.12.00 - —
Salicylate, NF, dms ..... lb. 1.75 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton.56.70 -66.15

Strophanthin, K, bots ..... oz.25.00 -25.50
G. (see Ouabain, USP).

Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75

Strychnine, NF, powd., cns., 10-oz. lots oz. 1.10 - —
Phosphate, NF cns., 100-oz. lots.oz. 1.14 - —
Sulfate USP, cryst., cns., 25-oz. lots oz. .96 - —
powd. 100-oz. lots..... oz. .85 - —

Styrax, USP, cs ..... lb. .78 - .80

Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
l.c.l., same basis... lb. .23½- —
tanks, same basis .... lb. .20½- —
synthetic rubber grade 99%, dms., c.l., frt. alld. lb. .19 - —
l.c.l., same basis... lb. .20 - —
tanks, same basis.....lb. .17 - —

Styrolyl acetate, bots.....lb. 1.45 - 1.70

Sucrose, crude, bgs., dlvd., N. Y. lb. .0555- —
refd., white, bgs., refy., E .. lb. .0855- —
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —

Sugar (see Sucrose, crude, refined).

Sulfabenzamide, dms.....lb. 4.00 - 4.50
Sodium, dms.....lb. 4.10 - 4.60

Sulfacetamide, fib. dms.....lb. 4.00 - 4.20
Sodium, fib. dms.....lb. 5.00 - 5.20

Sulfadiazine, USP, microcrystals, dms..lb.10.60 -11.10
powd., dms.....lb.10.25 -10.75
Sulfadiazine-sodium, USP, dms .lb.11.25 -11.75
microcrystals, dms. .....lb.11.60 -12.10

Sulfaguanidine, USP, dms ..... lb. 2.50 - —

Sulfamerazine, USP, microcrystals, lb.10.65 -11.15

Sulfamerazine-sodium, USP, dms., lb.11.25 -11.75

Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms..... lb. 8.50 - 9.00

Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms. ..... lb. 1.70 - 1.90
powd., dms..... lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75

Sulfapyridine, NF, powd., bots., tins, lb. 7.00 - 7.50

Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00

Sulfathiazole, USP, microcrystals, dms lb 2.85 - 3.00
powd., dms..... lb. 2.50 - 2.65

Sulfathiazole-sodium, USP, dms. lb. 2.75 - 2.90

Have you tried

CONOCO H-340

as a secondary plasticizer for polyvinyl chloride formulations

Outstanding features of Conoco H-340 when used in polyvinyl chloride formulations are:

- **Excellent light stability**
- **Improved low-temperature flexibility**
- **Economical—unequalled advantages for cost-wise formulators**
- **Significantly lower initial and aged viscosity in plastisols**
- **Tensile and hardness properties are not materially affected**

Conoco H-340 is an almost water-white liquid having a viscosity of about 20 centipoises at 100°F. It is readily available in commercial quantities in either drums or tank cars.

We will be glad to give you further information and samples. Send us your request on your company's letterhead.

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Petrochemical know-how from the ground Up!

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CONTINENTAL OIL COMPANY

Petrochemical Department, Division D-11

630 Fifth Avenue, New York 20, N. Y. 1353 No. North Branch Street, Chicago, Ill.

Sulfur, coml., flour, bgs., mines..100 lbs. 2.30 - —
bbls., mines ..... 100 lbs. 3.05 - —
lump, bgs., mines..... 100 lbs. 2.20 - —
bbls., mines ..... 100 lbs. 2.65 - —
crude, bulk, c.l., mines, contract. long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.31.00 -33.00
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 -29.50
refd., flowers, USP, bgs., mines. 100 lbs. 4.00 - —
bbls. ..... 100 lbs. 5.25 - —
flour, light, bgs., mines..100 lbs. 3.60 - —
bbls., mines ..... 100 lbs. 4.50 - —
lump, bgs., mines..... 100 lbs. 3.30 - —
rolls, bgs., mines..... 100 lbs. 3.85 - —
bbls., mines ..... 100 lbs. 4.40 - —
salt block, bgs., mines 100 lbs. 3.50 - —
virgin block, bbls., mines 100 lbs. 3.45 - —
rubbermakers, coml., reg., bgs., mines..100 lbs. 2.40 - —
bbls., mines 100 lbs. 3.55 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.50 - —
bbls., mines..... 100 lbs. 3.65 - —
refd., bgs., mines..... 100 lbs. 3.25 - —
bbls. mines ..... 100 lbs. 4.30 - —
treated, 2.5% mineral oil, bgs., mines..100 lbs. 2.70 - —
bbls., mines...100 lbs. 3.85 - —
10% pine tar, bgs., mines. 100 lbs. 3.50 - —
Dichloride, dms., c.l., works, frt. equald. lb. .04 - —
l.c.l. same basis ..... lb. .04¾ - —
tanks, same basis ..... lb. .03¾ - —
Dioxide, liq., coml., cyls., works, frt. equald. lb. .10 - .12
multi unit cars, works. lb. .0535- —
tanks, works ..... lb. .045 - —
refrigeration, cyls., dlvd. lb. .27 - —
Monochloride, 55-gal., dms., c.l., frt. equald. lb. .04 - —
l.c.l., same basis ..... lb. .04¾ - —
tanks, same basis ..... lb. .03¾ - —
Sumac leaves, 28%, bgs., ex-dock, ton.132.00 - —
ground, bgs., ex-dock... ton.127.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 - .91
Carteret, N. J unit-ton. .88 - .91
triple, 48% or more, a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton. .98 - —

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.25 - —
l.c.l., same basis ..... lb. 1.30 - 2.30
Isopropyl ester, dms., c.l., works, frt. equald. lb. 1.30 - —
l.c.l., works ..... lb. 1.35 - —
Talc, dom., ord., Calif., grd., bgs., c.l., works ton.32.00 -38.50
Vermont off color grd., bgs., c.l., works ton.18.40 - —
l.c.l., works ..... ton.36.00 - —
fibrous, New York, grs., bgs., c.l., works ton.27.00 -32.00
l.c.l., works ..... ton.30.00 -35.00
99.5%, 325 mesh, bgs., c.l., works ton.30.00 - —
l.c.l., works ..... ton.33.00 - —
99.95% micronized, bgs., works ton.37.00 - —
tmp., Canadian, grd., bgs., c.l., mines ton.20.00 -25.00
Tallow, edible, tanks, dlvd ..... lb. .10½- —
inedible, extra, tanks, dlvd .... lb. .08⅝- —
fancy, bleachable, tanks, dlvd., lb. .08⅝- —
guaranteed, dms., f.a.s..... lb. .10 - —
No. 1, tanks, dlvd ..... lb. .07¾- —
special tanks, dlvd..... lb. .08⅛- —
sulfonated, 25%, bbls., l.c.l. lb. .08¾- .09
50%, bbls., l.c.l. ..... lb. .09¾- .10¼
Tankage, animal, feeding, 9-11% ammonia, bulk..unit-ton. 5.00 - —
Chicago ..... unit-ton. 5.50 - —
Tapioca flour, Brazilian, bgs., ex whse. lb. .07¾- .08¼
Siamese, top grade, bgs., ex whse. lb. .07½- .07¾
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis .... gal. .50 - .51
tanks, same basis ..... gal. .39 - —
25-28%, dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis.... gal. .57 - .58
tanks, same basis .... gal. .46 - —
50-53% dms. c.l. same basis. gal. .70 - .72½
l.c.l., same basis..... gal. .73½- .74½
tanks, same basis..... gal. .62½- —
Coal (see Coaltar)
Tartar, emetic (see Antimony-potassium tartrate),
Terpine glycol ether, dms., c.l., works lb. .23½- —
l.c.l., works ..... lb. .25½- —
tanks, works ..... lb. .22 - —
Hydrate, NF, cryst., powd., fib. dms. lb. .67½- .74
Terpineol, dms., l.c.l., dlvd E. lb. .20¾- —
extra, dms ..... lb. .41 - .60
prime, dms ..... lb. .30 - .45
Terpinyl acetate, extra, cns., dms.lb. .60 - .75
prime, dms ..... lb. .55 - .70
Propionate, dms ..... lb. 1.75 - 2.00
Terra alba, (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Propionate, USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works..... lb. .20½- .21⅛
smaller dms., works ..... lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
l.c.l., dlvd. E ..... lb. .62½- —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E ..... lb. .50 - —
tanks, dlvd. E ..... lb. .47 - —
Tetrahydrofuran, dms., c.l. or t.l., works lb. .36½- —
l.c.l., or l.t.l., works..... lb. .37 - —
tanks, works ..... lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate)
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Thallium metal, dlvd ..... lb. 12.50 -15.00
Sulfate 99% bots., dlvd ..... lb 8.00 -13.00
Theobromine, NF, fib, dms .... lb. 4.00 - —
And sodium acetate, USP, fib. dms lb. 4.20 - —
Sodio-Salicylate, NF, fib. dms lb. 3.50 - —
Theophylline, anyhd or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms kilo.80.00 - —
Mononitrate, USP, fib. dms kilo.80.00 - —
Thiocarbanilide, dms., ton lots.. lb. .72 - —
less tons lots ..... lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., dms., c.l., works. lb. .36 - —
l.c.l., works ..... lb. .38 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo.450.00 -500.00
Thyme leaves, French, bgs..... lb. .19 - .22½
Spanish, bgs. ..... lb. .09 - —
Thymol, fib, dms..... lb. 2.25 - 2.35
Iodide, NF, dms..... lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Metal (Straits) ..... lb. .96⅝- —
Oxide (see Stannic oxide).
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous).
Titanium dioxide anatase, chalk resistant, bgs., c.l., dlvd lb. .22½- —
l.c.l., dlvd. ..... lb. .23½- —
ceramic, bgs., c.l., dlvd.... lb. .22½- —
l.c.l., dlvd. ..... lb. .23½- —
reg., bgs., c.l., dlvd ..... lb. .22½- —
l.c.l., dlvd ..... lb. .23½- —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton.120.00 - —
Niagara Falls, N. Y., c.l., ton.137.50 - —
5-ton lots ..... ton.142.50 - —
ton lots, c.l. ..... ton.147.50 - —
rutile, nonchalking, bgs., c.l., dlvd. E lb. .24½- —
l.c.l., dlvd, E ..... lb. .25½- —
Milled titanium dioxide $7.50 per ton higher.
Hydride, cns., works ..... lb. 7.95 - 9.00
Pigment, calcium-rutile base, bgs., c.l., dlvd. lb. .08⅜- —
l.c.l., dlvd ..... lb. .08⅞- —
Tetrachloride, tech., dms., c.l., works lb. .40¾- —
l.c.l., works..... lb. .43¾- —
tanks, works ..... lb. .39¾- —
dl-a-Tocopherol, bots..... kilo.149.65 - —
Acetate, bots ..... kilo.136.00 - —
o-Tolidine base, dist., kgs..... lb. 1.30 - —
Tolu balsam, cns. ..... lb. 4.25 - 4.50
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works ..... lb. .70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
l.c.l., same basis..... lb. .80 - —
tanks, same basis ..... lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
l.c.l., same basis ..... lb. .24 - —
tanks, same basis ..... lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid, dms., frt. alld lb. .60 - .61
Toluol, coaltar, indust or nitration, tanks, works:—
Bethlehem, Pa ..... gal. .34 - —
Birmingham dist..... gal. .32 - —
Chicago dist ..... gal. .35 - —
Cleveland dist. ..... gal. .32 - —
Geneva, Utah ..... gal. .26 - —
Johnstown, Pa. ..... gal. .32 - —
Lackawanna, N. Y..... gal. .35 - —
Lone Star, Tex .... gal. .33 - —
Lorain, Ohio ..... gal. .32 - —
Middletown, Ohio ... gal. .33¼- —
Minnequa, Colo. .... gal. .32 - —
Philadelphia district.. gal. .34 - —
Pittsburgh dist. ..... gal. .32 - —
Sparrow's Point, Md gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32 - —
petroleum, indust., 2°, tanks, works:—Albany, N. Y. gal. .35 - —
Bayonne, N. J..... gal. .34 - —
Baytown, Tex..... gal. .32 - —
Chicago, Ill. ..... gal. .35 - —
Detroit, Mich .. .... gal. .35 - —
Houston, Tex ..... gal. .33 - —
Philadelphia, Pa..... gal. .34 - —
Providence, R. I..... gal. .35 - —
Wood River, Ill.... gal. .25 - —

2-4 Tolylenediamine, cryst., fib, dms., c.l., frt. alld lb. .91 - —
l.c.l., frt. alld ..... lb. .94 - —
powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks ... lb. 1.65 - 1.80
Brazilian, Surinam, cs .... lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns .. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. 20 - —
l.c.l., l.t.l., works ..... lb. .26 - —
Triacetin, dms., c.l., dlvd. E, of Rockies lb. .39 - —
l.c.l. same basis ..... lb. .40 - —
tanks, same basis ..... lb. .37 - —
Tributyl citrate, tech., non-ref., dms., c.l., frt. alld E of Denver lb. .42 - —
l.c.l., frt. alld E of Denver. lb. .43 - —
tanks, frt. alld E of Denver. lb. .40 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l. same basis ..... lb. .53 - —
tanks, same basis ..... lb. .50 - —
Tributylamine, cms., c.l., works lb. .67 - —
l.c.l., same basis ..... lb. .68 - —
tanks, same basis ..... lb. .65 - —
Trichlorobenzene, dms., c.l., works, frt. alld E lb. .14½- —
l.c.l., frt. alld E ..... lb. .15½- —
tanks, frt. alld E ..... lb. .13 - —
Prices in the West 1¾c higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .11¾- —
l.c.l., dlvd. E ..... lb. .12¾- —
tanks, works, frt. equald ..... lb. .10¾- —
Trichloroethane, dms. c.l., works lb. .12
l.c.l., works lb. .13½- —
tanks, works lb. .11½- —
Tricholine citrate, 65% soln., ref. cbys., works, frt. adjusted lb 1.40 - 1.45

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New Standard! Chlorate-free
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Chloroform • Ortho-dichlorobenzene • Methylene Chloride • Methyl Chloride

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Tricresyl Phosphate—Wax, Microcrystalline

Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l dlvd. lb .36 - —
tanks, dlvd lb .33 - —
petroleum, dms., c.l., dlvd lb. .35 - —
l c.l dlvd lb .36 - —
tanks dlvd lb .33 - —
Triethanolamine, dms., c.l., dlvd. E lb. .24 - —
l.c.l., same basis lb. .25 - —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
Triethyl citrate, refd., tech., nonret dms., c.l., frt. alld. E. of Denver lb. .45¾- —
l.c.l. frt alld. E of Denver. lb. .46¾- —
tanks, frt. alld. E. of Denver. lb. .43¾- —
Phosphate, dms., c.l., works lb. .38 - —
l.c.l. same basis lb. .39 - —
tanks, same basis lb. .37 - —
Triethylene glycol dms. c.l. dlvd E. lb. .20¼- —
l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd E lb. .47 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .22¾- —
l.c.l., dlvd E lb. .23¾- —
tanks, dlvd. E lb. .20¾- —
Triethylamine, 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 - —
l.c.l., works, frt. equald, 100% basis lb. .42½- —
tanks, works, frt. equald, 100% basis lb .33 - —
Trioxane, pure, dms., c.l., t.l., dlvd. E lb. .50 - —
l.c.l., dms. dlvd. E lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate bbls. c.l. frt. equald lb. .40 - —
l.c.l., frt. equald lb. .41 - —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½- —
l.c.l., frt. alld. E lb. .21½- —
Prices 1c per lb higher in West.
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic)
Trypsin, pharmaceutical, 1:75, dms., works lb 6.25 - —
dl-Tryptophane, fib ctns., works. kilo.165.00 - —
Tungsten metal, powd., 98.8%, dms., dlvd lb. 4.35 - 4.40
Turpentine, gum (see Protective Coatings market, Naval Stores).
Tyrothricin, USP, bots gram .75 - .85

U

Unicorn root, false (see Helonias root).
True (see Aletris root)
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.120.00 - —
l.c.l., dlvd. E, ex whse. ton.140.00 - —
45% N, agricultural, bgs., c.l., (30 tons), dlvd. E ton.105.00 - —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va. ton.126.00 - —
Urea-ammonia liquor, C grade, tankcars, same basis ton.124.50 - —
37 grade tankcars, same basis. ton.153.00 - —
Urethane, USP, dms. lb. 1.50 - —
Uva ursi leaves, bls lb. .12 - .14

V

Valerian root, Belgian, bgs. lb. .38 - .40
dl-Valine, dms., works lb.21.00 - 27.50
Valonia beards, 40-42% tannin, bgs., exdock ton.77.00 - 78.00
cups, 28-30% tannin bgs., exdock ton.54.00 - —
extract, powd., 63% tannin, bgs., ex-dock, duty extra lb. .08 - —
Vanadium pentoxide tech dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 6.50 - 7.00
Mexican, cuts, tins lb. 7.75 - —
whole, tins lb. 8.50 - —
Tahiti, cs. lb. 6.00 Nom.
Vanillin, ex eugenol, tins, 25-lb. lots. lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex lignin, dms., 25-lb. lots lb. 3.00 - —
smaller lots lb. 3.05 - 3.15
Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .18½- —
l.c.l., dlvd. E lb. .19½- —
tankcars, dlvd. E lb. .16½- —
tanktrucks, dlvd. E lb. .17½- —
n-Butyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Chloride monomer, tanks, frt. equald lb. .10½- —
Ether, USP, anesthesia, bots., 50 c.c., hospitals, bot 1.12 - —
75 c.s. bot. 1.56 - —
Vinyl ether, tech., dms., c.l., works. lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutyl ether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb. .30 - —
tanks, works lb. .27 - —
Methyl ether, cyls., works lb. .23 - —
tanks, works lb. .20 —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.
Trichloride (see Trichloroethane).
2-Vinylpyridine, dms., works lb. 1.40 1.5
Vinyltoluene, dms., c.l., frt. alld. lb. .19¼- —
l.c.l., frt. alld. lb. .20¼- —
tanks, frt alld lb. .18 - —
Viosterol in alcohol, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units 1,000,000 units. .035 - —
in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02 - .04¾
lots of 1 billion USP units. 1,000,000 units. .025 - .05¼
lots of less than billion USP units. 1,000,000 units. .03 - .05¾
Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram gram. .07¼- —
dry 500,000 units per gram kilo lots kilo.67.50 - —
325,000 units per gram. same basis kilo.43.88 - —
250,000 units per gram. same basis kilo.33.75 - —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
liq., in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
B_1 (see Thiamine hydrochloride).
B_2, (see Riboflavin).
B_6 complex, natural (see Rice bran concentrate and Yeast).
B_{12}, crystalline, 1-gram or 5-gram vials gram.245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
C (see Acid, ascorbic).
D (see Oils, cod liver and fish-liver, Calciferol, and Viosterol).
D_2, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
less than kilo lots kilo.45.00 - —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin).
H (see Biotin)
K_1 Active (see Menadione).
K_1, 25 gram bots gram 4.50 - —
Violet methyl toner (see Blue methviviolet toner
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls lb. 2.25 - —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
25-49-lb. lots, N. Y. or Chicago. lb. 2.05 - —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 - —
Wattle bark, fair average, African, bales, ex dock ton.99.00 - —
merchantable, bales, ex dock ton.96.00 - —
extract, liq., 35% tannin, bbls lb. .09¾- .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09¾- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
Wax, amorph. (see Wax microcrystalline).
Bayberry, bgs lb. .43 - .45
Bees, crude, African, bgs lb. .66 Nom.
Brazilian, bgs lb. .66 - .67
Central American, bgs lb. .63 Nom.
Chilean, bgs lb. .66 - .67
refd., USP, bleached, white bricks, 100 lb. ctns lb. .74 - .77
slabs, 100 lb. ctns lb. .73 - .76
yellow, bricks, 100 lb. ctns lb. .66 - .68
slabs, 100 lb. ctns lb. .65 - .67
Candelilla, crude, bgs lb. .50 - .52
refd., bgs lb. .53 - .55
Powdered candellila, 20 mesh, 1c. per lb. higher, 80 mesh, 7c.; 100-200 mesh, 8c.
Carnauba, chalky, bgs., ton lots. lb. .55 Nom.
North country No. 2, bgs., ton lots lb. .63 Nom.
pure refd., bgs., ton lots. lb. .71 - .73
No. 3, Ceara, crude, bgs., ton lots lb. .55 - .57
refd., pure, bgs., ton lots lb. .65 - .66
tech., bgs., ton lots lb. .62 - .63
Parnahyba, crude, bgs., ton lots lb. .58 - .60
refd. pure, bgs., ton lots lb. .66 - .67
yellow No. 1, Ceara, bgs., ton lots lb. 1.08 - 1.10
Parnahyba, bgs., ton lots, lb. 1.10 - 1.12
Powdered carnauba wax price differentials same as powdered candelilla.
Japan, cs. lb. .44 - .46
Microcrystalline, 170-175°F., m.p. ASTM, penetration 15-20 ctns., 20,000 lbs., group 3, works lb. .13½- .14½
smaller lots, same basis. lb. .14½- .15½
black, ctns., 20,000 lbs., same basis lb. .12 - .13
smaller lots, same basis. lb. .13 - .14
white, ctns., 20,000 lbs., same basis lb. .24½- .25½
smaller lots, group 3, works lb. .25½- .26½
180°-185°F. m.p., ASTM, penetration, 7-11; amber, ctns., 20,000-lb. lots, same basis. lb. .16½- —
smaller lots, same basis. lb. .17½- —
black, ctns., 20,000 lbs., same basis lb. .15 - —
smaller lots, same basis. lb. .16 - —
white, ctns., 20,000 lbs., same basis lb. .27½- —
smaller lots, same basis. lb. .28½- —
190°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .20½- —
smaller lots, same basis lb. .21 - —

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Wax, microcrystalline, 190°-195° m.p., ASTM, penetration 2-7, black, ctns., 20,000 lbs., same basis. lb. .18½ - —
smaller lots, same basis. lb. .19 - —
white, ctns, 20,000 lbs., same basis lb. .34 - —
smaller lots, same basis. lb. .35 - —
Montan, dom., refd., bgs lb. .27 Nom.
imp., crude, Bohemian, bgs lb. No prices.
German, bgs. lb. No prices.
Ouricury, refd., pure, bgs lb. .82 - .83
tech., bgs lb. .78 - .80
Paraffin (see P).
Spermaceti blocks, cs. lb. .30 - .33
cakes cs. lb. .31 - .34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works lb. .65 - .75
spot lb. .67½ - .72½
White lead (see Lead, white).
White pine bark, rossed, bls lb. .18 - .19
White precipitate, USP, powd., dms. lb. 6.55 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .19 - .19
rossed bls lb. .19 - .22
Witch hazel bark, bls lb. .16 - .17
leaves, bls. lb. .20 - .21
Wollastonite, fine, bgs., c.l., works. ton 39.50 - —
t.c.l. ex whse ton 56.00 - —
medium, bgs., c.l., works ton 27.00 - —
l.c.l., ex whse ton 44.00 - —
Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs lb. .20 - .25
Levant, bgs lb. 4.25 - 4.50

X

Xylene (see Xylol).
Xylenol, cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 - —
56°-58°C., dms., l.c.l., works, frt. equald lb. .30 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis gal. .96 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
l.c.l., same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —
Xylidines, mixed, dms., c.l., truckload, works lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .38 - —
Xylol, coaltar, indust., tanks, works:—
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .32 - —
Chicago district gal. .35 - —
Cleveland district gal. .34½ - —
Geneva, Utah gal. .27 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex. gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio gal. .34 - —
Minnequa, Colo gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .32 - —
Sparrows Point, Md. gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, O gal. .32½ - —
petroleum, indust., tanks, works:—
Bayonne, N. J. gal. .34 - —
Bayonne, N. J. gal. .34 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

Yara yara, ctns lb. 2.15 - 2.63
Yeast, brewer's, dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb dms lb. .52 - —
200 int'l B units per gram, 100-lb. dms lb. .56 - —
300 int'l B units per gram, 100-lb dms lb. .60 - —
Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. .33 - —
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.
Benzidine AAA, bbls., dlvd. lb. 2.00 - —
AAOT, bbls., dlvd. lb. 2.25 - —
Lightfast, bbls., dlvd lb. 3.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb. 2.85 - —
Hthopone, all shades, bbls., frt. alld., E of Rockies lb 1.15 - —
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher.
Chrome, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .33 - .33½
Dlvd. Ala., Fla., Ga., La. (Shreveport 1¼ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Hansa 10 G, bbls., same basis as yellow, chrome lb. 2.15 - —
G pigment, bbls lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .05¼ - —
Peruvian type, bgs., t.c.l. lb. .038 - —
pure, bgs., c.l., works lb. .11½ - —
l.c.l., works lb. .11¾ - —
Mercury oxide, bbls., 1,000-lb. lots lb. 5.58 - —
smaller lots lb. 5.60 - —
Ocher (see Yellow, iron oxide, natural).
Zinc (chromate), bbls., dlvd. lb. .27 - .27½
basic, dlvd lb. .31 - —
Yerba santa leaves, bls lb. .40 - .42
Yohimbine hydrochloride, bots, tin. oz. 4.50 - —

Z

Zein, bgs., 36,000-lb. lots or more lb. .38 - —
1,000 to 36,000-lb. lots, works lb. .40 - —
smaller lots, works lb. .43 - —
Zinc acetate, NF VIII, dms lb. .53 - —
tech., dms., works lb. .27 - —
Zinc borate, bgs., c.l., dlvd. E lb. .192 - —
t.c.l. dlvd. E lb. .202 - —
Chloride, NF, gran., dms. lb. .42 - —
precipitated powd dms lb. .36 - —
soln., 50%, dms., c.l., works, 100 lbs. 5.50 - —
t.c.l., works 100 lbs. 6.10 - —
tanks, works 100 lbs. 4.85 - —
tech., fused, dms., c.l., works, 100 lbs. 10.10 - —
l.c.l., works 100 lbs. 10.60 - —

Zinc chloride, tech., gran., fib. dms., c.l., works 100 lbs. 10.85 - —
l.c.l., works 100 lbs. 11.35 - —
Chromate (see Yellow, zinc).
Cyanide, kgs., 1,000-lb. lots or more, works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works. lb. .16¼ - —
l.c.l., works lb. .17¼ - —
Fluoride, bbls., works lb. .49 - .50
Hydrosulfite, dms., c.l., frt. alld lb. .21½ - —
l.c.l., frt. alld lb. .22 - .37½
Metal, prime western slabs, E. St. Louis lb. .13 - —
New York lb. .13½ - —
Naphthenate, liq., 8% Zn., dms., frt. alld lb. .24½ - —
10% Zn. dms., frt. alld lb. .30 - —
Oxide, pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14 - —
l.c.l., same basis lb. .15 - —
leaded, 25%, bgs., c.l., mills, frt. alld. lb. .14¾ - —
l.c.l., same basis lb. .15⅜ - —
50%, bgs., c.l., same basis lb. .14⅞ - —
l.c.l., same basis lb. .15⅜ - —
French process, coml., green seal, bgs., c.l., frt. alld lb. .15¾ - —
l.c.l., same basis lb. .16¼ - —
red seal, bgs., c.l., same basis lb. .15¼ - —
l.c.l., same basis lb. .16¼ - —
white seal, bgs., c.l., same basis lb. .16¼ - —
l.c.l., same basis lb. .17¼ - —
USP, ctns., c.l., frt. alld lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
Zinc oxide Pac. coast prices 1c. higher.

Zinc phenolsulfonate, NF, gran., dms. lb. .39 - —
powd., dms lb. .42 - .49
Resinate, precip., 7.2-7.6% Zn, dms., frt. alld lb. .29 - —
Silicofluoride, bbls., works lb. .12½ - .14
Stearate, tech., USP, ctns., c.l., lb. .39 - —
l.c.l. lb. .40 - .44
Sulfate, cryst., 22% ZN, bgs., c.l., works, frt. alld 100 lbs. 8.05 - —
t.c.l., same basis 100 lbs. 8.60 - —
flake, 25½%, Zn, bgs., c.l., works, 100 lbs. 6.00 - 7.40
l.c.l., works 100 lbs. 7.00 - 7.90
powd., monohydrate, 36% Zn, bgs., c.l., dlvd. E 100 lbs. 8.50 - —
l.c.l., dlvd. E 100 lbs. 9.50 - —
Zinc sulfate in bbls. 40c. higher.
USP, gran. dms lb. .26 - —
Sulfide, pure, bgs., c.l., dlvd. lb. .2530 - —
Undecylenate, dms. lb. 2.25 - 2.50
Yellow (see Yellow, zinc).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 9.65 - —
bbls., c.l., works 100 lbs. 10.25 - —
l.c.l., works 100 lbs. 10.75 - —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l. lb. .25½ - —
l.c.l. lb. .26 - .41½
normal, dms., l.c.l., works lb. .52 - —
Zircon (G), gran., bgs., c.l., works. lb. .03½ - —
5 tons to c.l., works lb. .03⅝ - —
1 ton to 9,999-lb. lots, works. lb. .04 - —
smaller lots, works lb. .06½ - —

Zircon (G), milled, bgs., c.l. works. lb. .04½ - —
5 tons to c.l., works lb. .04⅝ - —
1 ton to 9,999-lb lots, works. lb. .04⅝ - —
500 to 1,999-lb lots, works. lb. .07½ - —
Zircon (G) in barrels, 1c. higher.
Zirconium acetate, 13% soln. ZrO_2, c.l., 30,000 lbs minimum, works lb. .23 - —
Hydride ens., works lb. 7.60 - 8.45
Nitrate, dms., ex whse lb. 4.50 - 7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric-fused, bgs., c.l., works lb. .44 - —
5-ton lots, works, lb. .44½ - —
1 ton to 9,999-lb. lots, lbs., works lb. .45 - —
CP, white, grd., bbls., or bgs., works lb. 1.50 - —
lump, electric fused, bags, 500 to 1,999-lb. lots, works lb. .45½ - —
smaller lots, works. lb. .48 - —
milled, electric-fused, bgs., c.l., works lb. .59 - —
5-ton lots, works lb. .59½ - —
1 ton to 9,999-lb. lots, works lb. .60 - —
500 to 1,999-lb. lots, works lb. .60½ - —
smaller lots, works. lb. .63 - —
Oxychloride, cryst., ctns., 5-ton lots, works lb. .35½ - —

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- Hydrofluoric Acid Aqueous
- Hydrofluosilicic Acid
- Lead Fluoborate
- Metallic Fluoborates
- Potassium Bifluoride
- Potassium Chromium Fluoride
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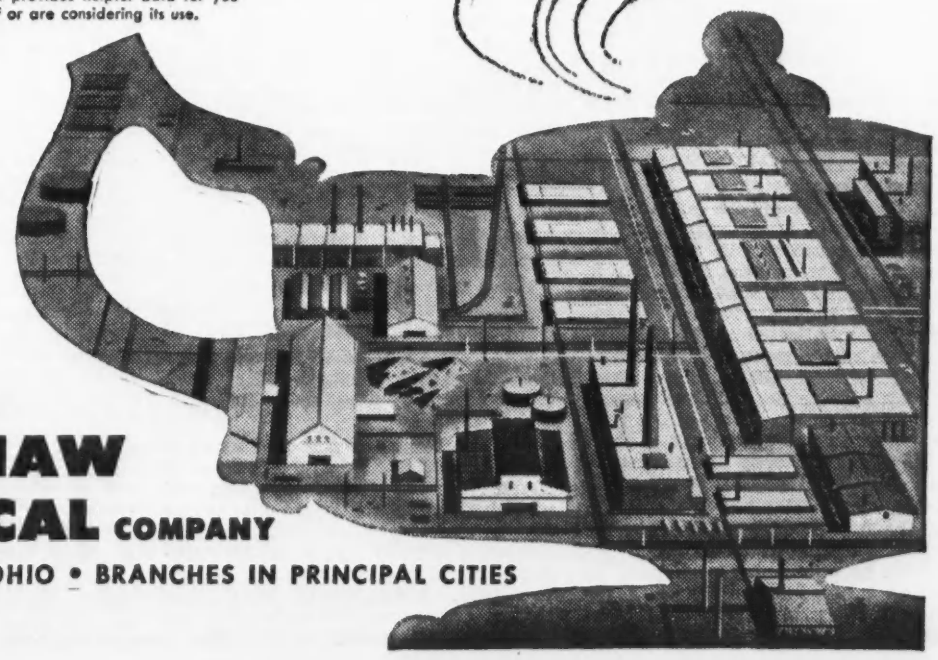

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Pharmaceutical Industry's New Venture in Public Relations

For the first time in its long, eventful, and seriously interesting history, the American pharmaceutical industry has had a general public relations program based on human contacts. The occasion was the pharmaceutical session of the Industrial Council sponsored by Rensselaer Polytechnic Institute at Troy, N. Y., October 28 and 29, the thematic nature of which was reported in OPD October 31, beginning on page 4.

The IC sessions are conferences of executive representatives of the specific industry with several hundred teachers in social studies and guidance posts in the public schools in every state of the union. The pharmaceutical session was remarkably well representative of both parties. It was financed by more than sixty members of the industry. In the words of the industry's chairman of the program committee, the representatives of the industry learned more from their guests than the latter got from their hosts.

The working scheme of the conference was a series of forums by panels of the industrialists in which a total of eighteen such groups participated, with three successive simultaneous sessions of six groups, most of them assisted by representatives of education. The topics with each panel were scheduled to be those presented in the latest preceding theme addresses:—(1) "The Pharmaceutical Industry: How It Began and How It Developed," and "The Pharmaceutical Industry: Its Contributions to Health; (2) "Research in the Pharmaceutical Industry," and "Clinical Research in the Pharmaceutical Industry"; (3) "The System of Distribution in the Pharmaceutical Industry." The actual discussions, however, ranged far and wide.

Several big questions got special attention in a summation panel near the end of the conference, one of the most important having to do with the Salk polio vaccine program. On that subject the industry spokesman, an executive of a producer of the vaccine, admitted that several errors of judgment had been made in the taking of a calculated risk based on convincing experimental data. But, he said, the facts and results showed that the vaccine was a very valuable contribution to the service of health, the occurrence of paralytic polio in children having been reduced at least 50 percent. Because of emotionalism, he said, it was very difficult, if not impossible, to change the firmly fixed opinions of the public, but nobody knew exactly what had happened at several stages. Unfortunately the spokesman did not present the fact that the much publicized untoward occurrence was in no way attributable to the vaccine itself. It is because they believe that the vaccine was at fault that parents and school authorities manifest fear and reluctance with reference to the immunization program. He did point out however that, because the full development of the immunization effects of the vaccine requires about two weeks, a child can be afflicted shortly after vaccination.

Several things stand out as a lesson from the five IC conferences thus far held. The first is that still better results will be obtained if each party is given an inning; if the session is divided into two parts, one of them comprising panel forums by representatives of the sponsoring industry; the other reversing the parties and having panels forums by educators.

The handling of the questions in panel forums has made it clear that communication, especially person to person, is one of business management's toughest jobs. The industrial representation should have a larger element of supervisors of personnel training and of executives trained in the human contact aspects of public relations. Industries with an important retail division, such as the pharmaceutical, should have members of that division in their representation; for that is where the desirable and necessary contacts with educators can most readily be developed and maintained.

Although it has nothing to do with the IC project, there is much that industry well would know in the newly launched publication by the United States Office of Education of a series of chapters in a statistical summary of education from 1950 to 1952.

Questions by Teachers

The matters on which the teachers at the pharmaceutical industry conference sought information were very numerous. The questions with which the information was sought ranged variously in angle, style and emphasis. Those covered in the succeeding paragraphs are typical.

How can teachers be informed on the industry so as to lead the thinking of students beyond the corner drug store?

The matter of information for educators came up many times and from many angles. Questions were raised on why the pharmaceutical industry did not provide informative bulletins as other industries do, mention being made of iron and steel, petroleum and rubber services. Films were mentioned in that connection, and the possibility of getting copies of the pictures in the art display at the conference.

What clues can be followed in influencing a student in the choice of a vocation?

The best means is to develop good understanding of responsibilities, as well as possibilities; thus reducing the washouts after college entrance. The majority of those employed are not above high school graduates at the time. All are most successful in doing what they want to do. Graduation requirements should be improved. A good foundation in the three R's is important; also a desire to do ones best at any task.

Does the industry invest in research in commercial and social problems?

There is spending in that direction, it was said, and the volume is increasing, especially in market research.

What can be done to interest more students in science courses, even to the extent of making use of available scholarships?

That problem was said to call for a deal of collaborative and coordinated thinking on the part of education and all industry. In comments outside the forums one of the views expressed by education leaders was that the textbooks in science courses were lacking in appeal. It was also suggested that if such courses were designated as engineering, rather than as scientific or technical, they would have a closer appeal— at least for boys.

What are the employment chances for the average student?

They were said to be very good, especially for those having a scientific background. Employees from that group were doing very well.

Where does a research worker first get an idea?

The birth of a researcher's ideas was said to be in inspiration from his high school teacher.

What are pharmacy course requirements?

Information was given on how to get data in that connection from the American Foundation for Pharmaceutical Education.

What opportunities are there for women in the industry?

That field was said to be limitless, emphasis being laid on the scientific and technical side, illustrated by the presence of a number of women on industry panels.

Are traveling exhibits of any kind available for creating student interest in scientific courses?

The exhibit provided by the Manufacturing Chemists Association was cited, also a local one in Elizabeth, N. J.

Can plant tours be arranged for students?

It was told that almost every pharmaceutical manufacturer has open house for such tours—and they are so popular that it is not necessary to send out any invitations.

To what extent does the industry collaborate with workers in other fields of research?

Such cooperation was said to be wide, the work on streptomycin being cited as an example. Some of these relationships are complementary, that with respect of blood plasma being an example.

What liaison is there among the several pharmaceutical firms with reference to basic research programs and progress?

Exchange of information by way of publication of data was said to be the general practice. There is not much actual collaboration; although much has been done by way of programs with government agencies, such as the Office of Scientific Research and Development. Much information gets circulated by way of the scientific sections of the industry's associations.

Is there cooperation with state institutions?

Several programs were cited, such as that on epilepsy. The institutions were said to be anxious to get help in research.

To what extent are notable discoveries accidental?

Serendipity was said to have a fairly large part in the results of chemical research—as it had in the discovery of the first synthetic dyestuff.

How can information be got on the relations of the industry with the Food and Drug Administration?

Those relations were described, in part by a member of the FDA staff, as cordial and cooperative. Information covering the field will be made available next year in connection with the fiftieth year of the food and drug law.

What is the difference between an ethical preparation and a proprietary product?

The answer given directly to this question was not exactly accurate. It was said that the difference was determined by federal law, ethical preparations being those restricted to sale only on prescription; proprietary products being those which could be sold over the counter. The difference really is that an ethical preparation is one promoted primarily, if not wholly, to physicians—the term was in common use long before there was any pure drug law—while proprietary product is one promoted almost wholly to the public.

How are prices determined?

No direct answer was made to this inquiry; but information on the various contributory factors was brought out in discussions encompassing costs of production and distribution and the influence of competition. The point was made that costs of research and development are not a factor, they being met from earnings on existing products.

Why do prices of different brands vary so much?

Various reasons, including "free riding" on a competitor's advertising. Also

—*Continued on page 40*

Washington Talks It Over

By Ralph L. Cherry
Chief, OPD Washington Bureau

A subcommittee of the senate small business committee is conducting a broad survey on the question of fair trade, the results of which may prove highly important in future consideration by congress for legislation on the subject. About 1,700 manufacturers are being contacted through questionnaires for information on how the fair trade contracts are operating.

The first questionnaire has just gone out under a covering letter from Sen. Hubert Humphrey of Minnesota. Mr. Humphrey is an advocate of the fair trade laws, as are most of the other members of the small business committee. This questionnaire has gone only to the manufacturers. A second questionnaire is now in preparation, which will be sent to retailers and wholesalers.

The questions posed by the subcommittee center around manufacturers' fair trading practices and enforcement policies. The manufacturers are asked, among other things, to enumerate the major problems they have encountered in enforcing fair trade agreements and indicate the probable effects on their firms should the Miller-Tydings and McGuire acts be repealed.

One of the questions asked also is whether the manufacturer sells directly to discount houses. This has been one of the main complaints of some retailers opposed to fair trade, that the manufacturers sometimes sell to the discount houses who, through their low price policies and low overhead, get the cream of the market and leave the retailers as little more than show-cases for the manufacturers products.

Stockpile Items Release

In event of an enemy air attack on the continental United States, it will not be necessary for industries to wait for an official proclamation of the President to release the materials in the national stockpile. President Eisenhower signed an order recently authorizing the Director of the Office of Defense Mobilization to release the materials in such an event.

In such a contingency there could be extensive damage to facilities essential to the conduct of war. It would be extremely important at that time to have immediate access to stockpile materials which could be used for the prompt repair and rehabilitation of the most essential facilities.

At present, stockpile materials can be released only on order of the President for purposes of the common defense. The latest order of the President does not change this but merely provides the director of ODM with authority in advance to handle urgencies which might be created by enemy attack.

Flood Damage Figures

The Business and Defense Services Administration has the final figures now on the damage caused by the August floods in the northeastern states, which show them to be about the worst from natural causes in modern history.

A breakdown of figures gathered by the Federal Civil Defense Agency and various state and local agencies showed a death toll of 179 and major personal injuries to 6,992 persons, and damages of $457,674,044 to industries, dwellings, farms and highways.

Connecticut bore the brunt of the disaster with damages amounting to $215,245,000, including $83,870,000 to its industry; Massachusetts' damages amounted to $110,412,000 including industrial damages of $55,000,000; New Jersey suffered $27,525,000 of damages including $1,250,000 to industry; New York reported damages of $16,284,000, including $382,500 to industry; Pennsylvania's damages totaled $70,206,000, including industrial damages of $20,684,000; and Rhode Island reported damages of $18,000,000 and $5,700,000 to its industries.

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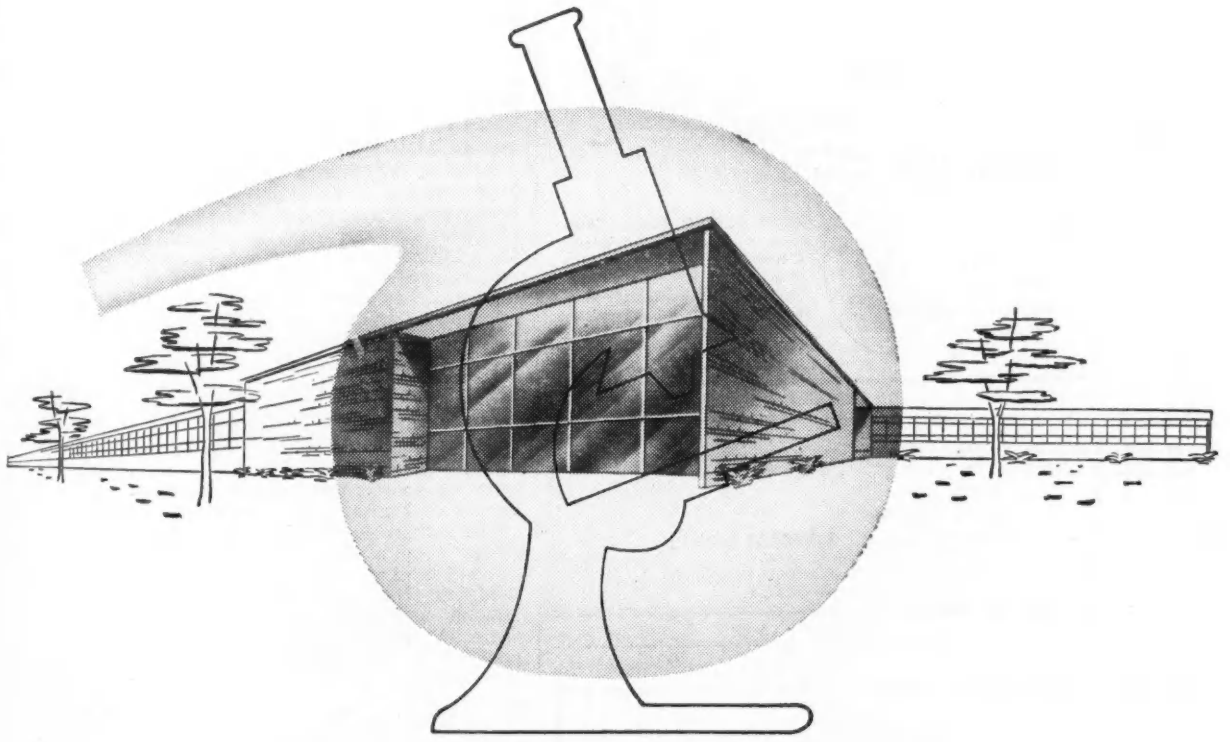

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Heavy Chemicals

Sodium sulfhydrate liquid and silicon tetrachloride were higher last week. Scheduled to be increased January 1 were sodium metasilicate, concentrated and hydrated orthosilicate, and sodium sesquisilicate, although prices for sodium silicate and pentahydrated metasilicate were slated to continue through the first quarter of next year.

Some of the sodium phosphates were also slated for increases the first of the year. This was brought about by higher raw materials costs, as well as the fact that upward pressure had been placed on the sodium compounds by various increases in the other phosphates last October 1.

Demand for chlorine and the alkalies kept supplies in close balance in several areas. Paper industry and organic chemical demand were prominent in the chlorine market. Rayon, petroleum and other end uses figured in large volume withdrawal of caustic, and aluminum, phosphate and glass demand kept the soda ash market strong.

Mineral acids were currently enjoying a sales position that harked back to the boom days of a few years ago, according to several producers. Steel production two weeks ago was at 100 percent of capacity and the record-breaking output was largely responsible for continuing strong demand.

The nonferrous metals market was featured by a sharp increase in the price of platinum metal. Copper prices held firm in this country, although the London market declined during the week following the end of a labor dispute in Chile. Mercury was still none too plentiful, and stocks were closely held.

The American Paper and Pulp Association reported production for the week ended October 29 at 96.5 percent of theoretical capacity, as compared with the revised figure of 98.5 percent for the previous week and 96.5 percent for the corresponding week of last year.

Acid, Hydrochloric—The volume of demand hinged largely on geographical location, as in previous reports. Buying interest in the northeast and midwest continued strong, and in some parts of the south, where inquiry had been slow earlier, substantial gains in sales were reported.

However, in certain regions of the south and southwest, heavy supplies of byproduct acid continued to be a bothersome problem to producers of chlorinated organics, particularly in view of current high production rates for chlorinated solvents, vinyls, and other hydrocarbons.

Acid, Nitric—The market was in close balance last week, as consuming demand remained at a high level. Steel and nitration of organics figured heavily in consumption, as did government orders. Producers pointed out that shipments in all types of containers were in large quantity, and that carboy deliveries in particular were very satisfactory. There was a general feeling that prices would hold without change, not only for the rest of this year, but for the first quarter of 1956.

Acid, Sulfuric — Demand remained strong for alkylation, steel, rayon, pigments, alcohols and synthetic detergents, and the only real weak spot in the consumption pattern, according to producers, was fertilizer, which normally is down at this time of year. Prices were firm and were expected to hold through March, 1956. In some areas, stocks were in close balance with demand, while in others there was more acid on hand than consuming inquiry could handle.

Steel production last week was estimated at 2,368,000 tons by the American Iron and Steel Institute. This figure represents 98.1 percent of the industry's theoretical capacity. A new all-time high for steel output was set the previous week, as the industry produced at 100 percent of capacity, turning out a record 2,413,000 tons.

Chlorine — Demand continued strong throughout the end use pattern. Largely responsible for current heavy consumption was manufacture of solvents and other chlorinated organics, as well as paper production.

Lithium Chemicals—A producer announced that technical lithium carbonate would be decreased 3c. per pound effective January 1. New lithium carbonate prices at that time are slated to be 82c. per pound, drums, carlots, f.o.b. works, and 87c. per pound, less carlots, same basis.

Lithium hydroxide monohydrate was also scheduled for a reduction, and was cut 10c. per pound, also effective January 1, 1956. New prices at that time are scheduled to be 80c. per pound, drums, carlots, f.o.b. works, and 81c. per pound, less carlots, same basis.

Silicon Tetrachloride — Prices were higher during the week. Technical silicon tetrachloride was quoted at 17c. per pound, tankcars, f.o.b. works; 18c. per pound, drums, carlots, same basis, and 22c. to 30½c. per pound, less carlots, same basis, as to quantity. The 2c. per pound increase was said to be largely due to recent increases in chlorine.

Soda Ash—Supplies of light and dense soda ash appeared to be fairly well in balance last week, although some delays in shipments were reported, depending on geographical location. Dense ash sold fairly well during the week, but the glass industry did not appear as active as earlier. It was anticipated that glass manufacture would pick up within the next few weeks for Christmas packages, resulting in increased demand from that quarter.

Light ash sales were reported in large volume, due to increased production of some phosphates, as well as continuing high aluminum output rates. Stocks of light ash were said to be on the tight side in some sections of the northeast.

Soda, Caustic—Demand generally was strong, with such industries as rayon, oil and paper prominent factors in current heavy consumption. Shipments of liquid caustic to rayon mills continued in large volume, as rayon production for textiles and tire cord continued well above last year's levels. Petroleum refining and paper production also accounted for heavy withdrawals.

There continued to be persistent reports that flake caustic was on the tight side. Although most of this material is said to go to the small consumer in drum quantities, strikes during the summer affecting output of three major producers are said to have had a prolonged effect on the supply position, since facilities for producing dry caustic are not nearly as large as those for liquid output.

Good demand for dry caustic was also important in the tight supply position. Consumption for manufacture of detergent mixes, textile dyeing and finishing, and specialty purposes was in large volume.

Sodium Metasilicate—The price rise of 25c. per hundred pounds across the board initiated by a major producer and scheduled for January 1, 1956, was met by other producers last week. Anhydrous metasilicate was scheduled to list at $5.35 per hundred pounds, bags, carlots, f.o.b. works and $5.65 to $7.55 per hundred pounds, less carlots, same basis. Drum prices were 40c. per hundred pounds higher, as the current differential was carried over.

Producers of sodium metasilicate pentahydrate announced that there were no price changes slated either for the remainder of this year, or for the first quarter of next year. Pentahydrate was currently quoted at $4.10 per hundred pounds, bags, carlots, f.o.b. works, and $4.45 to $6.35 per hundred pounds, less carlots, same basis, with drums 40c. per hundred pounds higher.

Sodium Orthosilicate — Concentrated orthosilicate was slated to be increased 30c. per hundred pounds effective January 1 by some producers, following recent increases made effective for the fourth quarter this year by two manufacturers. Increases brought listings up to $6.30 per hundred pounds, drums, carlots, f.o.b. works, and $6.65 to $6.95 per hundred pounds, less carlots, same basis.

A producer of hydrated orthosilicate also announced that prices for this mate-

For Late Market Developments, See Page 4

Price Trends

Advanced

Platinum, $6 per oz.
Potassium stannate, 0.4c. per lb.
Silicon tetrachloride, 2c. per lb.
Sodium stannate, 0.5c. per lb.
sulfhydrate, liq., $5 per ton.
Stannic chloride, 0.5c. per lb.
Stannous chloride, anhyd., 0.6c. per lb.
hydrous, cryst., ⅜c. per lb.
Sulfate, 0.6c. per lb.
Tin, ¼c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
100.45	100.17	100.09	98.54

(For Current Prices see Page 9)

rial would be boosted by 15c. per hundred pounds, effective January 1, at which time material will be listed at $5.40 per hundred pounds, barrels, carlots, f.o.b. works, and $7.30 to $7.65 per hundred pounds, less carlots, same basis.

Sodium Phosphates—A producer announced last week that effective January 1, prices for several of the sodium phosphates would be increased. Sodium tripolyphosphate and tetrasodium pyrophosphate were lifted 15c. per hundred pounds across the board. Anhydrous monosodium phosphate, trisodium phosphate and sodium hexametaphosphate were increased 20c. per hundred pounds in bags for carlot and less carlot quantities. Bulk prices on these products are slated to list at 30c. per hundred pounds under bagged carlot prices.

Sodium Sesquisilicate—The advance of 20c. per hundred pounds scheduled by one producer to go into effect January 1 was met by the trade last week, and on that date, sesquisilicate was slated to rise to $4.80 per hundred pounds, bags, carlots, works, and $6.40 to $8.50 per hundred pounds, less carlots, same basis, as to quantity. Drums were to continue 40c. per hundred pounds higher.

Sodium Silicate—Producers of sodium silicate announced that prices would hold unchanged through the first quarter of 1956. This announcement applied to all grades of liquid and solid silicate.

Sodium Sulfate—Supplies of saltcake continued to rise, as figures compiled by the Bureau of Census showed August 31 inventories at 66,270 tons, as compared with 64,504 tons on hand at the end of July. On August 31, 1954, only 32,030 tons were in the hands of producers. Compared with last year, producers at present had little worrying to do about the supply position, due to the fact that the stockpile at the end of August was the highest in over two years.

Demand from the kraft paper industry was strongly maintained, as evidenced by the continuing high percentage of theoretical capacity in use by the paper industry week after week over the past several months. While there were no current indications of possible tightening, saltcake producers were reported keeping an eye on rapidly expanding kraft production facilities and increased output from existing plants.

Sodium Sulfhydrate—Liquid sodium sulfhydrate was raised $5 per ton effective last week. Liquid 40-46 percent sulfhydrate was newly quoted at $115 per ton, tankcars, f.o.b. works, 100 percent basis. Flake sodium sulfhydrate held steady and unchanged, with 70-72 percent material currently listed at 6½c. per pound, drums, carlots, f.o.b. works, and 7c. per pound, less carlots, same basis

Tin Chemicals—With higher tin, potassium stannate rose to 69.3c. to 75.9c. per lb; sodium stannate, 56.2c. to 61.6c.; stannic chloride, 77.6c. to 78.6c.; stannous chloride anhydrous, 83.6c. to $1.055; hydrous crystals, 78½c. to 79½c., and sulfate, 95.3c. to 97.3c. per pound, as to drum size.

Nonferrous Metals

Magnesium—Net shipments of magnesium mill products during September amounted to 2,159,000 pounds, according to the Bureau of the Census. This total was 24 percent above August shipments of 1,742,000 pounds. No allowance has been made for usual seasonal changes or number of working days in compiling this total or in computing changes from previous periods.

Molybdenum, Chromium, Cobalt, Nickel—The value of shipments during 1954 of establishments primarily engaged in producing molybdenum, chromium, cobalt, and nickel ores and concentrates amounted to close to $60,000,000. Of this total, $54,000,000 represented the value of such concentrates; and $6,000,000 represented the value of shipments of crude ores and of other products and services. The principal expenses of these establishments included $13,000,000 for wages and salaries, $10,000,000 for supplies, $500,000 for crude ores received for treatment, $2,000,000 for fuel and electric energy, and $3,000,000 for contract work. The cost of purchased machinery installed was $2,000,000.

Employment in these establishments averaged over 2,000 for the year. Capital expenditures for exploration and development work, new construction, and new and used machinery amounted to $5,000,000. The total horsepower of equipment available for use by these establishments was 107,000. Water intake for use during the year, including mine water, was 1,400,000,000 gallons.

The 1954 value of shipments by molybdenum, chromium, cobalt, and nickel ore ore establishments represented nearly a fourfold increase since 1939, the year covered by the preceding census of mineral industries. The tonnage of crude ore mined by such establishments increased almost threefold over this period. Employment more than doubled between 1939 and 1954, and horsepower of power equipment increased three-fold. Producing molybdenum ore establishments were located in Colorado and New Mexico; chromite ore establishments in Montana, Oregon, and California; cobalt, in Idaho; and nickel, in Oregon. In addition to production at these establishments, substantial quantities of molybdenum, cobalt, and nickel were obtained as byproducts of the establishments, substantial quantities of molybdenum, cobalt, and nickel were obtained as byproducts of the concentration, smelting, and refining of other metallic ores.

Imports of chromium, cobalt, and nickel ores and concentrates were valued at approximately $45,000,000 in 1954. Chromium imports came principally from Turkey, the Philippine Republic, and the Union of South Africa; cobalt imports from the Belgian Congo; and nickel imports from Canada. Imports of molybdenum ores were negligible.

Platinum—Spot metal went higher during the week, quoted at $97 to $99 per ounce, with some sales at higher prices.

Tin—Straits metal fluctuated narrowly on spot, ending at 96⅝c. per pound.

CHEMICALS OUTLOOK

November, 1955

WYANDOTTE CHEMICALS

This news bulletin about Wyandotte Chemicals services, products, and their applications, is published to help keep you posted. Perhaps you will want to route these and subsequent facts to interested members of your organization. Additional information and trial quantities of Wyandotte products are available upon request . . . may we serve you?

CAN YOU PROFIT BY THESE NEWLY DISCOVERED CHARACTERISTICS OF WYANDOTTE'S QUADROL?

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In epoxy resin formations, Quadrol appears to complement the curing effectiveness of primary amine curing agents.

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Quadrol is slightly hygroscopic and exhibits lower equilibrium values and a narrower humectant range than glycerol or sorbitol.

Quadrol reacts with dibasic acids to give resinous polymers. Ion exchange resins prepared from Quadrol may have great possibilities.

Because of the nitrogen atoms in Quadrol, it offers promise in the preparation of adhesives, particularly for metallic surfaces.

Quadrol (N,N,N',N' — tetrakis (2-hydroxypropyl) ethylenediamine) is a completely new polyol with six chemically reactive centers. A water-white viscous liquid, Quadrol is exceptionally heat stable. It has a boiling point of 225°C. at 5 mm.

As an intermediate, the unique structure and physical properties of Quadrol suggest possible use in the preparation of emulsifying agents, surface-active agents, pharmaceuticals, herbicides, fungicides, insecticides, and plasticizers.

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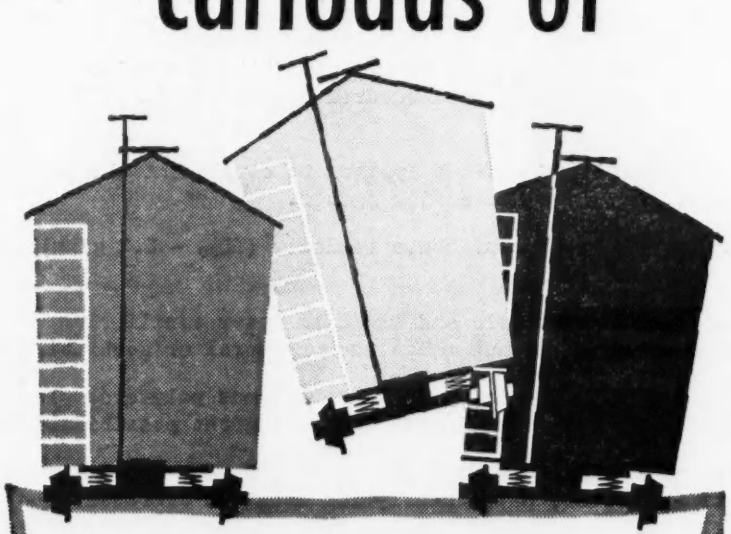

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Pharmaceutical Industry's Public Relations

—Continued from page 36

possibilities in quality—were mentioned in this connection.

Why does one have to pay three times as much for a product got on prescription as it would cost over the counter?

There was no basic evidence of the extent of such a condition and it was declared that the manufacturer had no connection with or knowledge of such practice. The only person who could answer the question was the one who had such a pricing policy.

Prescription prices were questioned from a number of angles, a particular request being for information on how to know if one were being overcharged and what to do about it. Obviously it was not possible to offer more than very little in the way of suggestion. It was said that the doctor could give some idea of what a prescription would cost, but that is a rather optimistic view; his information does not often go beyond the manufacturer's list price; although doctors are sometimes reported to ask their druggists what is charged for certain expectedly expensive prescriptions. It was complained that the patient did not know what a prescription called for and could not get a copy of the prescription if suspicious of overcharging. With the exception of prescriptions for narcotics and other restricted drugs, the patient is entitled to a copy. There was no suggestion that a patient shop a prescription among several drug stores. That might do some good; but there have been such things as prescription pricing schedules prepared by pharmacist groups of various scopes. Just what is the status of such things under laws against price-fixing depends on several factors. Books on prescription pricing have been published. They are not, of course, "official."

One thing that stands out in relation to prescription prices is whether each of the differing pricers dispenses exactly the same medicine. Substitution in that connection is one of the industry's big headaches. The pricing problem is so abstruse that it is quite natural that some educators said outside that the discussion left them still more confused.

How does the fair trade law benefit the consumer?

That was a natural member of the group of price questions. One teacher who asked it said that he was supposed to promote free enterprise; but he contended that it would be better for the consumer if seven small suppliers of an article in a community were displaced by one big one. He did not accept the statement by a panel member that fair trade maintained competition in a manner making sources of supply more readily available. It was not brought out that the fair trade law, in common with all the segments of the antitrust statutes, is not concerned with the consumer's interests. It was pointed out that fair trade is a desirable assurance of protection for a manufacturer's good will and the value of his brand. No information could be given on the condition of small businesses in states not having a fair trade law or on the percentage of drug products under fair trade

Suggestions by Teachers

The teachers had many things to suggest toward the improvement of the attitude and activity of the industry

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with reference to school problems. Some of these are set out briefly below.

Consideration of a plan in operation in Quincy, Mass., which has provided among other helpful guidance material motion picture films entitled "A Place for You."

Help and advice for students should be given at least as low as the tenth grade; promotion of quality should start at the kindergarten level.

Something should be done to remedy the lack of teachers. Individually expressed views of educator leaders outside the forums were in some cases that the lack was more in quality than in number; so the need was to make teaching more attractive—financially—to competent persons. Industrialists were in agreement, and some programs in that direction were cited. It was suggested by a neutral observer that industries endow chairs or otherwise subsidize competent teachers at various levels. It was stated that several manufacturers have programs for providing teachers with work as consultants.

Scholarships should be offered at high school levels.

Industry should contribute to the administrative costs of local schools.

Industrial executives should be members of local school boards.

Trained personnel should be sent to local schools to give talks along guidance lines.

Trainers of personnel and teachers in guidance posts should cooperate for mutual benefit in the service of industry; the former, it was said, know how to impart knowledge but do not have the knowledge required for such service; while the personnel trainers have such knowledge but do not have adequate ability to impart it.

Industry will find much useful assistance in the National Science Fair and district projects of similar purpose. They do much for teachers in science lines.

Provide schools with literature interpretative of the industry at the proper level.

This suggestion offers a big opportunity for the doing of a materially valuable service by the National Drug Trade Conference, the National Pharmaceutical Council, or especially the Health Information Foundation. The teachers' sentiment was that something other than promotive brochures should be provided. The example of Chemical Progress Week was cited. There was a difference of opinion among the teachers on the matter of industry's contributing displaced equipment to schools. The better part of the expression of attitudes was on the side of acceptance, several experiences in the useful application of such gifts being related.

Several educational leaders urged that local groups go to their industries and ask for assistance along needed lines. Their experiences in that direction were said to have been quite gratifying. It was suggested by several that the industry lay its problems before the coming White House Conference on Education. The suggestion was welcomed but the statement was made that the industry had not been invited to participate in that conference. Interest in the National Merit Scholarships movement was urged, this suggestion also being welcomed.

Antibiotics Conclave

—*Continued from page 3*

has been named *Streptomyces niveus*. Generic name of the drug is streptonivicin.

E. R. Squibb and Sons Division, Olin Mathieson Chemical Corporation, New York, reported that its scientists have discovered three new antibiotics.

One of the new antibiotics, called thiostrepton, was said to be effective in laboratory experiments against certain disease-producing organisms that show a tendency to develop resistance to penicillin and other presently-known antibiotics.

The other two drugs, designated amphotericin A and B because they are obtained from the same mold culture, show promise, Squibb said, of effective action against a wider variety of fungi than any of the present antifungal agents available for use.

This area of antibiotic therapy is relatively new, the first safe antifungal antibiotic—"Mycostatin"—having been made available to the medical profession by Squibb a year ago.

Dr. Aaron Prigot of Roussel Corporation, New York, reported discovery of "Soframycin," a new broad-spectrum antibiotic reportedly effective against a wide range of infectious illnesses. "Soframycin," moreover, is deadly to certain types of staphylococci not affected by other broad-spectrum antibiotics, Dr. Prigot said.

Merck Reports New Drug

Merck & Co., Rahway, N. J., indicated that it has found a new antibiotic, "Cathomycin," which, in test tube and animal studies, has successfully combatted bacteria causing abscesses, blood stream infections, serious urinary tract infections and whooping cough.

"Stylomycin," a new antibiotic developed at Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y., promises to give doctors a new weapon against sleeping sickness, it was reported by a quintet of Portuguese investigators.

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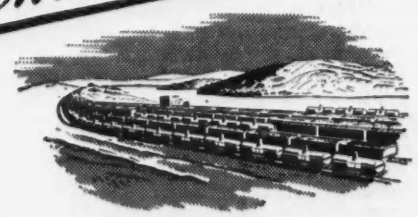

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Export Goods Regulations Easing for Reds Planned

Controls on exports of certain non-strategic commodities to the European Soviet bloc countries will be eased by the end of the year, it was announced last week by Secretary of Commerce Sinclair Weeks.

Mr. Weeks said that the Bureau of Foreign Commerce is now preparing a roster of "peaceful" goods which will be exportable to the Soviet countries under general license and without prior approval by the department. Examples of goods to be included on the list are:—Tallow, hides and skins, phosphate rock, and rosin.

Strategic goods, under present policy, are not licensed to the Soviet bloc countries and non-strategic goods may be exported to this area only under individual license. The new procedure will not affect export controls on shipments to Communist China or other Far East Communist points.

Chemists' Club Modernizes Library, Improves Museum

The Chemists' Club, New York, has announced several improvements in its library, among which are improved lighting, renovated tabletops, and more comfortable chairs. The library, located at 52 East 42nd street, is open to the general public during business hours.

At the same time, the club announced that it has restored and modernized the Priestley room, turning it from an infrequently used museum into a reading room for members. Specimens of handmade papers and watermarks, bequeathed to the library by the late Charles F. Roth during the past year, are on view in the room.

Donald V. Bauder has been appointed manager of trade sales for the finishes division of E. I. duPont de Nemours & Co., Wilmington, Del.

ARS Fills Experiment Post

Dr. E. C. Elting last week was appointed deputy administrator for experiment stations of the Agricultural Research Service. For the past three months Dr. Elting has been acting as assistant administrator of the service, following the retirement of Dr. R. W. Trullinger from this position.

Chemical & Process Moves

Chemical & Process Machinery Corporation has moved its offices to 52 Ninth street, Brooklyn, N. Y. The new telephone number is HYacinth 9-7200.

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Socony Mobil Reorganizing Overseas Operations Setup

A reorganization of the overseas operations of Socony Mobil Oil Company, New York, will take place January 1, with the establishment of a wholly-owned affiliate, Mobil Overseas Oil Company, B. Brewster Jennings, chairman of the board of directors of Socony Mobil, has announced.

Mobil Overseas Oil Company will have assets in excess of $500,000,000 and will operate with a high degree of autonomy, Mr. Jennings said, in line with Socony Mobil's decentralization policy.

The overseas company will integrate and be responsible for all activities of Socony and its affiliates in the Eastern Hemisphere and Latin America except for its interest in Standard-Vacuum, interests within major middle east concessionary areas, and producing operations within Venezuela, Colombia and Peru.

Officers and directors of Mobil Overseas Oil Company have all been chosen from senior members of the Socony Mobil group. President will be P. V. Keyser, jr., who will continue as a director and vice-president of Socony Mobil. Others will be:—F. S. Cooper, jr., director and vice-president in charge of marketing; W. G. Corwin, director in charge of producing; A. V. Danner, director and vice-president in charge of crude and wholesale sales; A. C. Ingraham, director and vice-president in charge of supply and distribution; R. R. Jackson, director in charge of manufacturing; W. L. King, director and general counsel; F. E. Powell, jr., director and vice-president in charge of marine trade; J. H. B. Wellacott, director in charge of finance; A. L. Lanckton, secretary; E. J. Glocke, comptroller, and F. L. White, treasurer.

Medicinals, Fats Materials Allotted Cambodia, Vietnam

The International Cooperation Administration last week issued procurement authorizations to Cambodia to purchase $600,000 of medicinal and pharmaceutical preparations, and to Vietnam to purchase $120,000 of fats and oils.

The Cambodia medicinal purchases will be made under authorization No. 42-370-99-A6-6207. Cambodia will handle the buying itself. The fats and oils purchases will be made under authorization No. 30-050-00-A6-6005 and will be handled for Vietnam by the Emergency Procurement Service, General Services Administration.

Central, McMillen Open Plant

Central Soya Company and McMillen Feed Mills, Fort Wayne, Ind., have announced the official opening of their plant at Chattanooga, Tenn. The operation includes a soybean solvent extraction plant, a feed mill and grain merchandising facilities.

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Textile and Leather Chemicals

Business in textile and leather chemicals continued active last week. Consumers placed a good volume of business for prompt needs and also showed increased interest in forward requirements. Prices continued steady and were unchanged for the entire list.

Consuming demand for potato starch was active and orders for sizable quantities were reported placed for requirements up to next June at prevailing prices. Other sizing materials also were in steady request for prompt delivery. Tapioca flour was in good demand for shipment from Brazil, while for interest in replacements from the Far East was limited. Corn starch and dextrin also was moved in good volume.

In the chemical group, bichromates and sodium hydrosulfite were in active demand for prompt requirements.

Tanners continued to replenish stocks by taking moderate quantities of tanning materials for prompt shipment. Inquiry for future delivery was more active, but most buying was restricted to immediate and prompt shipment. Valonia shipments were stronger. Beards were advanced $7 per ton; cups, $4 per ton and extract, one-quarter cent per pound.

Fiber consumption on woolen and worsted systems in September was 9 percent below August, but 13 percent above September last year, according to the Census Bureau. The weekly average raw wool consumption in September totaled 7,811,000 pounds, scoured basis, 7 percent below August, but 9 percent above September, 1954. Carpet class wool consumption was 1 percent above August and 15 percent higher in September last year, while consumption of apparel class wool was 11 percent below August but 6 percent above September last year. Carpet class wool stocks October 1 amounted to 38,600,000 pounds, scoured basis, 19 percent larger than reported July 1 and 4 percent above October 1, 1954.

Price Trends

Advanced

Valonia, beards, $7 per ton.
cups, $4 per ton.
extract, ¼c. per lb.

Reduced

None

Comparative Price Indexes

(100 – 1949 average)

Last week	Prev. week	Last month	Nov. 4, 1954
106.38	104.27	104.27	94.56

(For Current Prices see Page 9)

Chemicals

Bichromates — Production of sodium bichromate and chromate in August was reported at 9,967 tons, by the Census Bureau, against 9,690 tons in July and 7,049 tons, August last year. Stocks at plants amounted to 6,095 tons, August 31, against 5,197 tons, July 31. Deliveries against current contracts continued in active request. Market was firm at prevailing quotations.

Sodium Hydrosulfite—Consumers continued to take good sized quantities for prompt requirements. Prices were well held at current levels. Production in August totaled 1,988 tons, compared with 1,720 tons, July and 2,004 tons, August last year. Stocks at plants were reported at 1,368 tons, August 31 and 1,053 tons, July 31, according to the Census Bureau.

Sulfonated Oils—Moderate volume of business was reported for actual needs. All varieties were unchanged and steady.

Sizing Materials

Albumin Blood—Steady consuming demand which absorbed the bulk of production featured this market. Prices were well held at 65c. to 80c. per pound, depending upon quantity.

Corn Dextrin—Business was quite active for prompt requirements. Prices were maintained at current levels. Gum was quoted at $9.15 per 100 pounds, paper bags, carlots, New York delivery; canary, $8.89; dark, $8.99 and white $8.73, same basis. Smaller quantities were 15c. per 100 pounds higher.

Corn Starch—Consumers continued to absorb sizable quantities for nearby and later delivery. Quotations were without change and steady. Pearl was quoted at $7.13 per 100 pounds, paper bags, carlots, New York and powder, $7.25, same basis. Lesser quantities were 15c. 100 pounds more. Visible corn supply was increased 3,023,000 bushels to 22,791,000 bushels for the week ending October 28, compared with 17,850,000 bushels for the same time last year, according to the Chicago Board of Trade.

Egg Albumin—Trading was reported quite active for nearby needs. Market remained steady at prevailing quotations. Flake ranged from $1.80 to $1.85 per pound, and powder, $1.84 to $1.89, spot depending upon seller and quantity.

Liquid egg production during September for immediate consumption, freezing and drying totaled 9,012,000 pounds, compared with 9,752,000 pounds in September last year and the 1949-53 average of 11,896,000 pounds. Quantities used for immediate consumption and drying were larger than a year ago, while the amount used for freezing was 25 percent less.

Dried egg (egg solids) output totaled 1,159,000 pounds, compared with 953,000 pounds during September last year and the average of 1,692,000 pounds. September production consisted of 36,000 of dried whole egg, 638,000 pounds of dried albumen and 485,000 pounds of dried yolk. Production during September last year consisted of 92,000 pounds dried whole egg, 567,000 pounds of dried albumen and 294,000 pounds of dried yolk.

Frozen egg production during September totaled 5,328,000 pounds, against 7,132,000 in September last year and the 1949-53 average of 7,224,000 pounds. Frozen egg stocks decreased 26,000,000 pounds in September compared with 22,000,000 pounds last year and average decrease of 23,000,000 pounds.

Egg Yolk—Business was reported spotty, chiefly for actual needs. Prices were unchanged at $1.05 to $1.08 per pound, according to quantity. Yolk production in September totaled 485,000 pounds against 294,000 pounds, September last year.

Potato Starch—Consumers continued to show active inquiry and good volume of business took place at 5½c. per pound, carlots, mills. Maine for prompt and forward delivery. Production was in full swing in Maine and offerings were well held. Stocks on spot were unchanged at 8c. to 8¾c. per pound, exwarehoue, according to quantity. The Idaho market was unchanged and steady with business reported at 6¾c. per pound, carlots, mills for shipment to western points.

Tapioca Flour—Buying interest continued keen with trading reported in high grade Brazilian flour at 6.1c. per pound carlots, exdock. Stocks on spot were well held at 7¾c. to 8¼c. per pound, exwarehouse, as to quantity. Siamese flour, medium was quoted at 5.85c. per pound, carlots, exdock, for prompt shipment.

Tanning Materials

Cutch—Replacements were maintained at 8½c. per pound, exdock, plus duty, with trading thereat. Buying interest continued quite active.

Mangrove Bark—Business was spotty and confined to nearby shipment. Prices were unchanged. African bark was offered at $69 to $71 per ton, ex dock, Colombian bark was unchanged at $58 per ton, ex dock, and Ecuadorian $55 per ton, same basis, prompt shipment.

Myrobalans—Market remained steady and quotably unchanged. Trading was light chiefly for prompt shipment. Assorted JI's were quoted at $58 per ton, exdock; crushed, $82, and Bombay, $55, same basis. Extract was nominal at 10c. to 10¼c. per pound, exdock, plus duty.

Quebracho Extract—Buying interest was fair, with trading restricted to prompt shipment. Prices were steady. Solid ordinary guaranteed 63 percent tannin was held at 11 21/32c. and clarified 64 percent was 12 23/64c. per pound, exdock, plus duty.

Valonia—Primary market was stronger and shipments were higher. Beards were lifted to $77 to $78 per ton, exdock, and cups to $54 per ton for prompt shipment. Offers were light and closely held. Extract also was stronger with basic materials and raised to 8c. per pound, exdock, plus duty.

Wattle—Conditions in this market remained steady. Trading was light and spotty. Shipments were maintained at former levels. Fair average bark was unchanged at $99 per ton, exdock, and merchantable, $96, same basis, prompt shipment. East African extract was quoted at 9¾c. per pound, and South African, 10c., exdock, plus duty.

For Late Market Developments, See Page 4

Petroleum Derivatives

Price increases on petroleum sulfonates and petrolatum, effective today, were announced by a leading producer. Prices on all grades of petroleum sulfonates are increased ½-cent per pound. Petroleum sulfonate prices have not been raised since July 15, 1952.

Higher raw material costs are the primary reason for these price increases. Shortages are not anticipated.

The position of materials in the solvents and diluents market was firmer, on the whole, than had been previously noted during the past weeks. While there were no changes in quotations last week, a major portion of the products moved at a steady pace. Producers stated that inventories were adequate in most material to serve the needs of consumers.

Microcrystalline continued to make strides toward a firmer market last week as both foreign and domestic sales showed newly developed strength. the prime outlet for micrcrystalline is the relatively new food packaging field. Developed originally in the domestic market, the product has grown and been picked up by the foreign market. Sales particularly in the South American market have shown fast paced advancement.

The renewed strength present in the automotive industry has been the boon necessary to many solvents to shake them from a previously lengthening looseness. Though the situation in most instances had not become serious, the earlier weakness of the automobile market was doing some damage.

The expected show of strength in the propane market also has been developing steadily. Early cold spells in the northern mid-west, that extended into winter itself, helped give an early start to the seasonal market climb. Though there were no price changes last week, more shifts are expected in the market.

Solvents and Diluents

Benzol—This commodity's market appeared to be showing continued strength last week, it was reported. Most producers attributed the new strength of the market to the growing firmness of the automotive industry. Production has risen considerably, with no great rise showing in stock figures. However, suppliers report that supplies are sufficient to fill any needs that might rise in the immediate future. Quotations have remained unchanged.

Heptane—Consumption on the part of vegetable oil extractors was described as less than satisfactory in the industry. The market outlook for sales of both heptane and hexane was somewhat unstable it was noted. Clarification of the situation was said to remain in the hands of the government and military buyers. Although material has been moving slowly during the past few months, its prices have remained unchanged.

Partial Aromatics—Quotations remained steady over the past week, it was noted. Large volume use of fast evaporating partial aromatics continued in the automobile industry which, in its own right, was showing great strength in the production of new cars. Producers indicated that the market was well supplied with material. Other industrial users have also maintained a good sales demand.

Rubber Solvents — Some strength was marked by producers in rubber solvents last week, it has been reported. Major firmness appears to be derived from fringe areas of the automotive industry. Growing firmness within that industry have been marked in new strength in other solvents. Production, though good, has not varied for many months. Stocks are also good. Quotations remained unchanged.

Xylol—Users found sufficient supplies to fill their needs over the past few weeks, it has been reported. Activity exceeded earlier estimates of first quarter sales, industry sources exceeded shipments were reported going out as needed. Sales were expected to follow a steady trend for the coming months. Price quotations were the same as those in effect earlier and were steady.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
104.32	104.32	104.32	104.42

(For Current Prices see Page 9)

Lighter Fractions

LPG's—The market for this commodity continued to grow at a pace with the closing in cold winter weather, it was reported last week. Though no price change was noted, the market is considered at one of its firmest levels. Production of liquified gases during the month of August was 3,695,000 barrels, with a daily average of 119,000 barrels, according to the Bureau of Mines. The figure, though smaller than that of the previous month (July production was 3,811,000 barrels), is a strong advance over the 2,730,000 barrels production of the previous August. The production figure for the first eight months of the year was 28,151 barrels which, when compared with the 22,769,000 figure for the previous year's first eight months, reflects the growing strength of this market.

Waxes

Microcrystalline—This wax continued to show a particularly firm market last week, it was reported. Though no price variation has taken place since the ½c. hike on September 1, the continued growth of the market suggests change sometime in the not too distant future. Producers attribute the strength of the climbing market to the growth in use of food packaging. Advancing American use was picked up outside of the United States, one producer noted, and the export market is climbing as swiftly as the domestic one is. Production is high with stocks at a fair level.

Paraffin—This product has shown no great shift in over a year and a half. Though some strength has been shown on occasion, there has been no steady movement in any direction. Stocks are high, with production only fair.

Miscellaneous

Current industry reports indicate an increase in crude oil production and an increase in crude runs. According to the A.P.I., the daily average output of crude was 6,753,000 barrels, an increase of 39,000 barrels from the preceding week. Daily average crude runs to stills of 7,477,000 barrels were 120,000 above the preceding week and 549,000 barrels above the week ended October 22, 1954. Runs of foreign crude amounted to 807,000 barrels daily compared with 727,000 barrels in the preceding week. For the four-week period ending October 21, crude oil production averaged 6,705,000 barrels daily and crude runs to stills averaged 7,372,000 barrels daily with runs of foreign crude averaging 809,000 barrels daily.

Petrolatum—This market firmed up a bit more last week, and will be advanced in price ⅜c. today. This will be the second advance in the last two months. Previously, on September 1, it climbed ½c. per pound. Expanding usage and growth in demand were the primary reasons given for the rise. Resultant advances in production costs were also named.

Petroleum Sulphonates — This derivative will be advanced ½c. today, it was reported. The rise will bring it up to a 15c. per pound tankcar price listing. Reasons offered by one producer for the stepped up price were, a) expansion in the variety of uses which have resulted in the general growth of the industry, and, b) advances in the cost of production. Also listed as a cause was the growth in government contracts. Production appeared to be up, with stocks considered good.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended October 22 totaled 257,030,000 barrels according to data reported to the Bureau of Mines. Compared with the total of 255,134,000 barrels for the preceding week this represents an increase of 1,896,000 barrels comprising an increase of 1,968,000 barrels in stocks of domestic crude and a decrease of 72,000 barrels in stocks of foreign crude.

For Late Market Developments, See Page 4

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MCA Maps Winter Conference Program

—Continued from page 5

security for Eastman Kodak Company, and Glen Perry, assistant director of public relations for E. I. duPont de Nemours & Co.

There will be two speakers at luncheon. The first will be Victor G. Bartram, president of Shawinigan Chemicals, Ltd.; vice-president of Electric Steels, Ltd. and Canadian Liquid Air Company. The second will be John E. Hull, president of MCA.

The first panel in the afternoon will have Francis J. Curtis, vice-president in charge of personnel for Monsanto Chemical Company, as moderator. The participants will be George W. Bricker, jr., vice-president of Celanese Corporation of America; R. K. Mueller, vice-president of Monsanto Chemical Company, and Walter R. Mahler, president of Mahler Associates. The topic will be "Management Structure and the Executive Shortage."

'Future of Fuels'

The next panel, on "Future of Fuels in the Chemical Industry," will have Felix Wormser, assistant Secretary of the Interior, as moderator. Participants will be Paul M. Terlizzi, head of the propellant division of the naval air rocket test station of the navy at Lake Denmark, N. J.; J. C. Robinson, chief of the engineering development branch of the reactor development division of the Atomic Energy Commission, and Joseph R. Pursglove, jr., vice-president in charge of research and development for Pittsburgh Consolidated Coal Company.

There will be a panel on "Pollution" with Walker Penfield, of Pennsylvania Salt Manufacturing Company and H. L. Jacobs, of E. I. duPont de Nemours & Co., serving as moderators. Participants will be Dr. H. H. Shrenk, research director of the Industrial Hygiene Foundation of America; Harry Jordan, secretary of the American Water Works Association and W. I. Burt, president of Goodrich-Gulf Chemicals, Inc.

The last panel will be on "Computers and Their Value to Industry." John A. Hill, president of Air Reduction Company, will introduce the panel and the moderator will be C. L. Hardway, assistant sales manager of the electronic data processing machines division of International Business Machines Corporation. Participating will be C. Benton, Jr., manager of the sales office of International Business Machines Corporation in St. Louis, Mo., and D. W. Pendery, assistant director of the applied science division of IBM.

CCC Lists Its Commodity Offerings for November

Commodities being offered for sale for the month of November from the stocks of the Commodity Credit Corporation were announced last week by the Department of Agriculture. Included on the list, as in previous months, were nonfat milk solids, refined cottonseed oil, linseed oil, tung oil, soybeans, flaxseed, grain sorghums, gum rosin and gum turpentine.

Major changes in the list this month are the suspension of competitive bid offerings of corn for export in order to help strengthen producer prices during the period of the corn harvest and heavy marketings; the offering of limited quantities of wool on a competitive bid basis, and the offering of nonfat dry milk for animal feed at a uniform price throughout the country.

Michigan Chemical Appoints

Michigan Chemical Corporation, St. Louis, Mich., has appointed Dr. Dwight Williams director of research. Dr. Williams, who resigned as chief of the biology and chemical branch of the quartermaster research and development command of the army, will be located at the company's research and technical laboratories.

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Agricultural Chemicals

Lack of domestic activity in fertilizer materials caused the trade to focus interest on export demand. It was hoped that a good portion of the available cokeoven ammonium sulfate could be moved to Korea, as current stocks were heavy. It was noted in the trade that only a relatively small tonnage of nitrate was offered for Korean shipment.

Cyanamide demand held up well for special purposes. Animal proteins were dull with the exception of fishmeal, which went higher again last week following a sharp advance the week previous. Otherwise, tankage and dried blood were easier, with lower vegetable meals.

Phosphate rock producers continued to absorb recent increases in the cost of fuel oil and labor, and were reluctant to increase prices for rock because of currently dull consuming demand. Some sources expected quotations to go without change for the remainder of the year.

Normal superphosphate was in plentiful supply, and although some pickup in buying for the fall mixing season was noted, producers observed that buying interest at the formulators' level was even more cautious this year than last. Potash manufacturers noticed a similar situation affecting potash sales.

The domestic pesticide market was inactive at the formulators' level, and here, too, it was noted that formulators were being careful about buying in advance for the season next year. Exporters scrambled for what little overseas business presented itself, and competition in the DDT and BHC markets remained keen.

Price Trends

Advanced

Fishmeal, $1 per ton.
Fishscrap, $1 per ton.

Reduced

Blood, dried, N. Y., 25c. per unit-ton.
Tankage, Chicago, 25c. per unit-ton.
N. Y., 25c. per unit-ton.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Nov. 4, 1954
113.09	112.00	111.23	109.62

(*For Current Prices see Page 9*)

Animal and Plant Foods

Ammonia, Anhydrous—Buying interest for agricultural use continued seasonally dull. Industrial demand continued to hold up well, as the chemical industry in particular ordered in large quantity. A recent strike at the works of a producer in the southwest was said to have caused no supply difficulties in that area, due to the current slow status of the agricultural market.

Ammonium Nitrate—Supplies of ammonium nitrate were plentiful, as buying interest was at a low ebb due to the off season. Although there was only a small amount of ammonium nitrate offered on the recent Korean tender despite the relatively lengthy supply position, it was explained in the trade that high freight rates from plants to shipping points had some bearing on keeping offerings from being any larger.

Ammonium Sulfate—While producers of synthetic sulfate on the Gulf and west coasts were reported in favorable balance, it was evident that cokeoven material was in lengthy supply, particularly in view of current hand-to-mouth buying policies by domestic consumers. The trade looked forward to awards against the recent Korean tender, which were expected to have been made late last week.

August Production of synthetic ammonium sulfate increased to 82,453 tons from 79,948 tons produced in July, but was considerably lower than the output for August, 1954, which was 96,206 tons. Inventories in the hands of producers August 31 rose to 69,679 tons from 67,694 tons on hand at the end of July.

Animal Protein—Dried blood declined at New York, and tankage declined at New York, and Chicago, with easier vegetable meals. The animal protein market in general was dull and featureless last week, with the exception of fishmeal and scrap, which climbed another $1 per ton. Stocks were scarce, and consumers were not inclined to purchase at the higher prices, although some business was reported done at the higher levels.

Calcium Phosphate, Dibasic—Production of dicalcium phosphate in August rose to 14,130 tons from 12,360 tons produced in July, and was higher than the 10,106 tons produced in August, 1954, according to the Bureau of Census. Stocks in the hands of producers August 31 totaled 3,012 tons, as compared with 4,163 tons on hand at the end of July.

Cyanamide—Current interest in agricultural cyanamide was centered on the specialty grades, as straight fertilizer demand did not have much bearing on the present market. Special material continued to move well as a defoliant, and granular cyanamide for sterilization of tobacco seed beds was also said to be moving in good quantity.

It was pointed out that while a few years ago, sizable quantities of cyanamide moved to mixers during the fall mixing season, during recent years mixers had turned from cyanamide more to ammoniating solutions, and as a result, current demand from mixers represented only a small portion of the market. It was pointed out that about 90 perent of the fertilizer grade is sold directly as such to the farmer.

Phosphate Rock — The price situation appeared stable to most observers last week, with producers having currently absorbed increases in the cost of oil and labor. It was said that the advances in production costs had been absorbed due to sluggish buying interest which prevails at this time of year, with the thought in mind that if consumers did not order in any quantity to speak of at the current prices, then they surely would not buy material at increased prices.

The supply position was generally comfortable, not only for all grades of phosphate rock, but for normal superphosphate as well. While triple superphosphate did not appear to be in tight supply, there were indications that reserves were tightening, as one source was reported sold out through the first of the year.

Potash—The situation which has predominated this fall in the nitrogen and phosphate markets was said to apply in potash sales as well. The trade has become increasingly aware of a more conservative attitude toward purchases, and had-to-mouth buying is expected to prevail for the rest of the off season. Some pickup in interest from mixers was noted last week, although demand was said to have become active later than usual.

Los Angeles Market

Buying interest in fertilizer material continued to follow a seasonal pattern. Demand for inorganic items showed moderate increase with prices firm and no changes reported. With the fish cannery strike settled in Southern California areas, domestic meal prices dropped to $2.40 per unit of protein, subject to production. The supply position remained tight with no import meal offerings.

Pesticides

The market showed little in the way of activity last week on the domestic scene. Business at the manufacturers' and formulators' level was seasonally dull. In the export trade, it was indicated that there was quite a scramble for the small amount of business currently available.

BHC—The range in price for low gamma BHC continued last week, as 12-14 percent material was listed on spot at 0.7c. to 0.75c. per gamma unit-pound. Manufacturers withdrew concessions for consumer storage, and material was no longer available in large quantity shipments at 0.6c. per gamma unit.

A source pointed out that pesticides newly developed over the past few years had made substantial inroads on BHC consumption, and were a key factor in the weakness of the current market position.

Calcium Cyanide — One producer, in looking at records of sales, was of the opinion that overall consumption of calcium cyanide this year was well above last year's level. A key factor in the increased business was heavier consumption for grain fumigation.

Malathion — Business was satisfactory, and reported to be holding at the same level as last year at this time. Prices were steady and unchanged following a recent advance of 4c. per pound for technical malathion. It was reported that while material had been in short supply in previous years, expanded facilities had substantially increased production during the past season, and that presently supplies were ample.

For Late Market Developments, See Page 4

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Industrial Organic Chemicals

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
130.73	130.73	130.73	130.33

(For Current Prices see Page 9)

The market proceeded at a brisk pace last week, for the most part, with price schedules remaining firm and unchanged. The high rate of industrial production seemed to assure a continued good demand for many of the larger volume organic chemicals. Formaldehyde, a raw material in the manufacture of methanol and pentaerythritol, was in brisk call, according to most producers queried. Although there were occasional tight spots in the supply picture, the overall supply was regarded as being ample to cover consumer requirements. The steady rise in plywood production has resulted in a heavy demand for formaldehyde from manufacturers of adhesive resins used in bonding of the wood veneer layers in the plywood process. The heavy call for methanol has also put pressure on formaldehyde supplies, it was noted. Methanol is one of the principal chemicals used as an antifreeze component and the ever increasing number of vehicles on the nation's highways has resulted in a substantial boost in overall antifreeze consumption.

Ethylene oxide and ethylene glycol both continued in rather tight supply although this situation has improved since most antifreeze manufacturers have completed their contract commitments by this time. The solvent picture continued to reflect the heavy competition among producers although on the whole, business was reported brisk. Heavy production schedules in the auto and furniture industries as well as in appliance manufacture resulted in a strong demand for lacquer solvents, it was noted. Pricewise, there were no changes reported last week and it appeared likely that current schedules would continue to hold firm through the end of the year.

The chlorinated solvents were generally moving in a good fashion, according to trade reports with supplies adequate to cover consumer needs. The high level of industrial activity has placed emphasis on chemicals used in metal cleaning operations and degreasing such as tri- and perchloroethylene as well as carbon tetrachloride.

Acetic Anhydride—Demand for acetic anhydride was reported to be at routine levels. Supplies were ample for immediate industry needs. Prices were steady.

Production of acetic anhydride in August amounted to 69,498,553 pounds compared to 66,359,036 pounds produced during July. These statistics were recently released through the United States Tariff Commission.

Acetone—The strong demand for solvents in general was reflected last week in the steady inquiry for acetone. Supplies, however, were adequate to cover industry requirements and were expected to continue in the immediate future. Pricewise, there was no change and it appeared probable that this situation would remain so for the balance of 1955.

The United States Tariff Commission reported production of acetone in August to have aggregated 50,631,955 pounds compared to 43,942,513 pounds during July.

Butyl Alcohol—Demand for butanol was reported to be running at a steady pace last week. Supplies were adequate to meet consumers' requirements and were expected to continue in the immediate future. Prices were unchanged.

The Tariff Commission, in a recent report, listed production of normal butyl alcohol at 16,411,411 pounds in August compared to 18,242,940 pounds in July, 1955.

Cetyl Alcohol—Experiments currently under way in Africa point toward the possible development of a new and potentially large outlet for cetyl alcohol. African scientists were reportedly covering reservoirs in Kenya with a monomolecular layer of cetyl alcohol which has exhibited the facility of preventing the evaporation of water under the hot sun in that latitude. Cetyl, alcohol, a compound derived from whale oil, has successfully reduced water evaporation by more than one half in tests conducted to date. Method of application used was described as placing cetyl alcohol pellets in small box rafts from which the evaporation stopping fil is emitted. The alcohol was said to be nontoxic to both plant and animal life.

Formaldehyde—Inquiry continues brisk in face of a steady call for methanol and other industrial uses. Formaldehyde is the raw material used in methanol manufacture and hence its market status is closely connected to that of methanol. The continued boom in housing with a concommitant rise in plywood output has resulted in a good demand for formaldehyde from manufacturers of plywood adhesives. Resins manufacture also kept formaldehyde inquiry at brisk levels. Prices were firm and expected to hold unchanged in the immediate future and probably through the balance of 1955, at least.

Production of formaldehyde (37 percent by weight) totaled 93,911,997 pounds in August compared to 82,130,774 pounds in July, according to the United States Tariff Commission.

Formic Acid—Demand for formic acid was reported to be running along at a good level. Supplies were adequate to cover consumers' requirements in the textile and leather trades as well as other outlets, it was said. Production capacity was reportedly large enough to meet all anticipated needs in the immediate future and prices were firm.

Hexamethylenetetramine—Demand for hexamethylenetertamine was said to be moving at routine levels. Supplies were adequate to meet consumer requirements and were expected to continue in the immediate future. Prices were unchanged.

Production of hexamethylenetetramine totaled 1,167,660 pounds in August compared to an output of 1,167,920 pounds during July, according to the Tariff Commission.

Methanol—Demand for methanol was reported to be moving at a brisk seasonal rate last week. The antifreeze business appears to be quite strong with consumer demand at high levels. The result has been a surge in the demand for methanol which accounts for a substantial part of all antifreeze consumed. The steady rise in the number of trucks, cars and buses on the road and the larger cooling capacities of the new model cars which entail greater use of antifreeze have contributed to the overall increase in the consumption of methanol. In addition, prices were said to be at an attractive level particularly in view of the higher cost of permanent type antifreeze chemicals this year.

In addition to its use as an antifreeze chemical, methanol has been used in increasing quantities as a solvent and special motor fuel. The supply situation, on an overall basis, was adequate to cover trade needs, although there were instances of temporary delays in shipments.

Production of methanol during August according to the United States Tariff Commission aggregated 115,965,400 pounds compared to 115,951,246 pounds turned out in July this year.

Oxalic Acid—Demand for oxalic acid was reported to be at good levels. The generally high level of industrial activity in addition was ascribed as attributing to the steady consumer inquiry. Oxalic acid is used in substantial quantities in industrial cleaning chemicals with perhaps its foremost use in radiator and boiler cleaning compounds. The steady rise in the number of automotive vehicles on the road has resulted in an upsurge in the use of so-called specialty chemicals. Consumption of radiator cleaning compounds hits a seasonal peak twice a year, in the fall and in the spring. Usage of radiator cleaners is always at its high right about this time when motorists are preparing to add anti-freeze to their vehicles.

Supplywise, there appeared to be enough oxalic acid to cover consumer requirements. Prices were steady and expected to hold unchanged during the bal-

This market reports on industrial aliphatic organic chemicals. Reports on industrial aromatic organics may be found in the Coal Chemicals market, while reports on fine and rare organic chemicals appear in the Drugs, Fine Chemicals, Botanicals market.

For Late Market Developments, See Page 4

Dr. Frank G. Ciapetta has been named director of catalyst research for the Davison Chemical Company division of W. R. Grace & Co., Baltimore, Md.

ance of the year. Production of oxalic acid in August totaled 1,728,985 pounds according to the Tariff Commission, compared to 1,311,738 pounds in July.

Pentaerythritol—Demand for pentaerythritol was reported to be moving at a good level. Supplies were ample to meet current inquiry while prices were steady.

Production of pentaerythritol in August aggregated 5,438,452 pounds compared to 3,002,420 pounds turned out in July, according to the United States Tariff Commission.

Perchloroethylene — Supplies of perchloroethylene were reported ample to meet consumers needs at present. Inquiry was reported to be moving at a routine level for this time of year and was in line with the general high level of activity which is characteristic of industry at present. Pricewise, there was no change noted nor was any expected for the balance of the year.

Production of perchloroethylene (tetrachloroethylene) in August totaled 13,206,807 pounds compared to 13,803,549 pounds turned out in July this year. These figures were released by the Tariff Commission in its most recent production report.

Propylene Glycol—Demand for propylene glycol continues at a steady pace. The number of uses for this product, both in its USP and industrial grades, is quite large with the result that overall consumption is fairly constant throughout the year although occasionally affected by seasonal influences such as its use in antifreeze mixtures during the cold weather months.

Although there is less of a need for using propylene glycol in antifreeze as a result of the increased output of ethylene glycol, it has been long contended by some people in the trade that the use of some propylene glycol in ethylene glycol makes it possible to compound an anti-freeze that has better corrosion resistant qualities than one made with straight ethylene glycol. There is some belief that the inhibitors, or at least some of the inhibitors, are more soluble in propylene glycol than in ethylene glycol and that because of this, the rust inhibitor is more effective. However, with some of the more common type of anti-oxidants used as corrosion inhibitors experimentation has proved that some propylene glycol in the ethylene glycol functions to good advantage, according to some trade reports.

The use of propylene glycol in hydraulic brake fluid is another fairly outlet for this chemical. The steady increase in the number of cars, and other motor vehicles on the road, has, of course, boosted the consumption of brake fluid considerably. In this particular usage the propylene glycol serves primarily as a mutual solvent and coupling agent between the lubricant and the solvent. It also lends a freezing depressing characteristic as well as giving it a desirable viscosity both at low and high temperatures.

Another usage for propylene glycol, is in the manufacture of polyester resins. These resins produce different qualities from those manufactured with other polyhydroxy alcohols but for specific type of usages their qualities are superior according to some trade quarters.

The supply situation in propylene glycol was said to be adequate and barring any new uses requiring large quantities, should continue ample in the immediate future.

Trichloroethylene — Demand for this chlorinated solvent was reported to be moving at a good pace. The generally high level of consumer prosperity is reflected in the increased use of dry cleaning service on the consumer level with a subsequent salutary effect upon the consumption of trichloroethylene, the primary solvent used in the dry cleaning process.

Also of importance was the high level of activity in the auto industry and its effect upon other related industries. Trichloroethylene is an important solvent in industrial metal cleaning processes, it was noted. Supplies of trichloroethylene were reported to be ample to meet trade needs at present and should suffice in the immediate future. Prices were firm at their recently advanced level.

Production of tricholoroethylene in August aggregated 23,653,313 pounds, according to the United States Tariff Commission. By comparison, production in July had totaled 23,486,901 pounds.

Lauryl Alcohol Is Offered

Lauryl alcohol in commercial quantities is being offered by American Alcolac Corporation, Baltimore, Md., under the trade names "Siponol L2" and "Siponol L5." The former is a narrow cut alcohol and the latter a broader cut material. The products find their major uses as intermediates for surfactants and as foam and emulsion stabilizers, the company noted.

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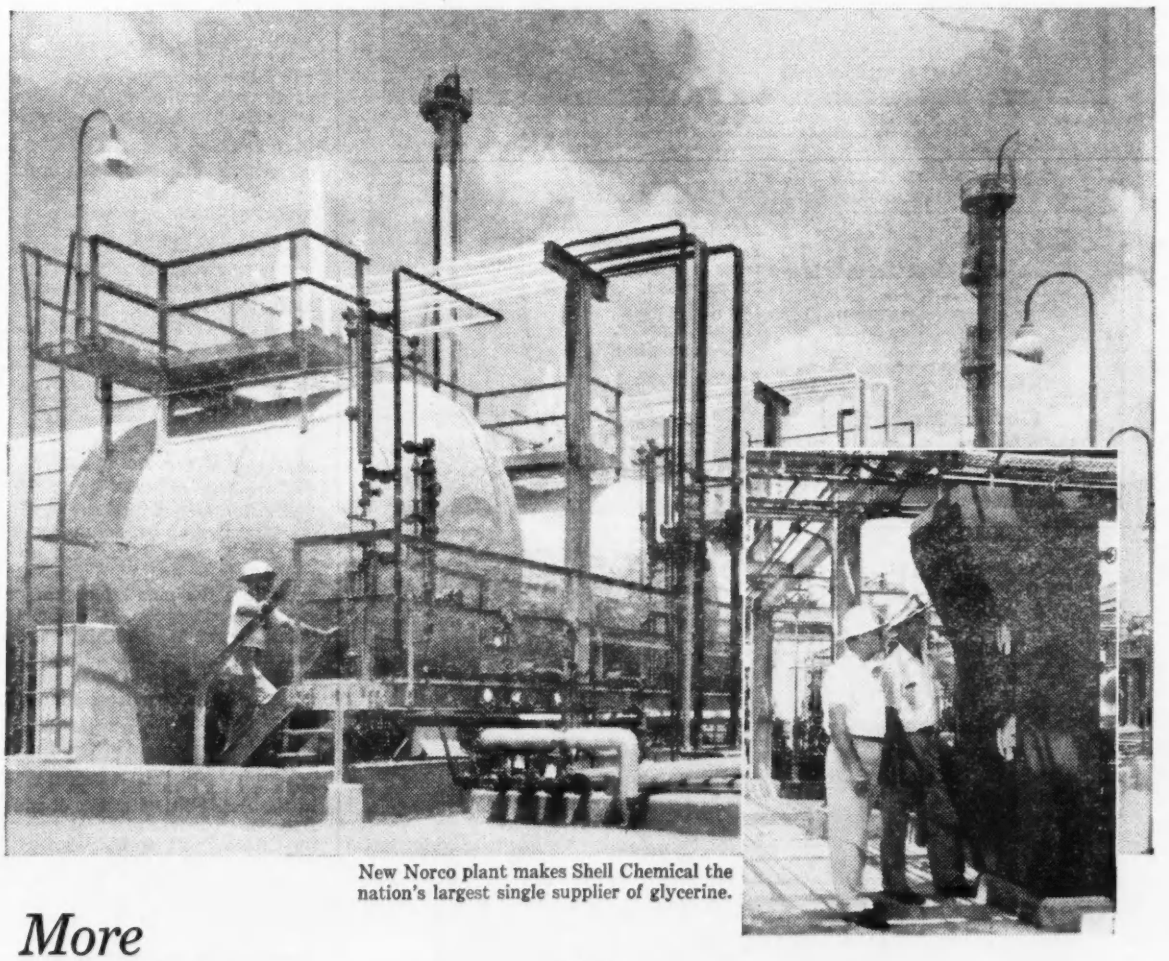

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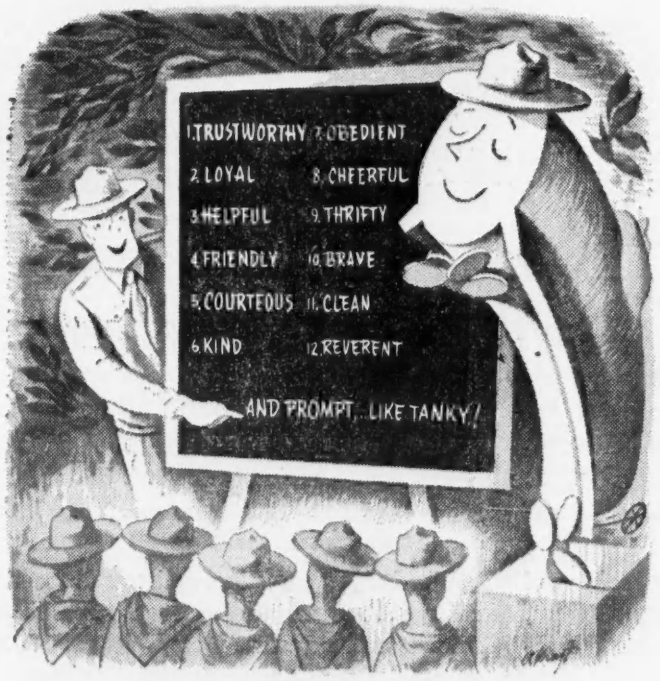

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Coconut Conference

—*Continued from page 7*

ing countries. That member countries be requested to submit pertinent information within three months. This would be collated and annotated and then circulated among member governments.

(2) That member governments be requested to (a) furnish the subcommittee on warehousing, handling, transportation and other facilities detailed information with regard to such facilities to be used as a basis for reporting recommendations to the next conference; (b) take action to persuade shipping lines to desist from resorting to the practice of fixing differential freight rates and changing rates without adequate notice and to request the United Nations and other international organizations to assist in securing relief from such practices.

(3) That a working party be established to make recommendations on establishing a joint promotion and information board for the coconut industry and to present schemes for its financing.

World Research Center Projected

(4) That a committee be appointed to study ways and means of establishing and financing an international coconut research center which will also undertake liaison between national research institutions and exchange experts and technical personnel between the center and individual coconut producing countries.

(5) That the Food and Agriculture Organization be requested to undertake a survey of coconut acreage and production and establish a coordinated research program in the countries of Asia and the Far East as well as survey their coconut and coconut product marketing problems.

The working sessions of the conference was closed to the public in order that discussions might be as free as possible. The conference generally met as a committee of the whole but appointed subcommittees to develop recommendations regarding most items on the agenda.

The subcommittees will continue to work on their respective projects during the next year and will report to the next International Coconut Conference which will be held in Colombo, Ceylon, probably late in 1956.

APMA to Hear Talk

—*Continued from page 7*

that afternoon, with Dr. W. H. McLean, of Merck & Co., presiding; the production session the morning of December 13, with Hubert E. Boyden, of Wm. H. Rorer, Inc., presiding; the medical and scientific session that afternoon, with Dr. George H. Schneller, of Wyeth Laboratories, a division of American Home Products Corporation, presiding; and the industry and economic development session on the morning of December 14, with John J. Powers, jr., of Chas. Pfizer & Co., presiding.

During the evening of December 13 the organization's formal dinner will be held in the Starlight Ballroom of the Waldorf-Astoria. The recipient of this year's annual award will be Dr. Charles W. Mayo, professor of surgery at the Mayo Foundation Graduate School of the University of Minnesota and a governor of Mayo Clinic, Rochester, Minn. The name of the speaker for the closing luncheon on December 14 will also be announced at a later date.

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Marathon Product Shows Promise as Feed Additive

An experimental dairy feed additive field-tested by Marathon Corporation, Rothschild, Wis., during the past four winters shows promise as a ketosis preventative, according to the company.

The product, tradenamed "Maracarb NC," is a complex mixture of sodium and calcium salts of lignosulfonic and wood sugar acids. It is derived as a by-product of Marathon's process for the manufacture of purified lignosulfonates from spent sulfite pulping liquors. In the most recent tests it was fed, at a level ranging from 2 percent to 4 percent in formula feeds, to eighty-three herds, comprising 2,144 producing dairy cattle in Marathon County, Wis. Results indicated an apparent effectiveness of 84 percent for the product in the prevention of ketosis. Limited quantities of "Maracarb NC" will be available for test marketing later this year.

Bids Wanted

Calcium carbonate, 37,500 lbs., ultrafine precip., suitable for use in formulation of printing inks, inv. 17-CCU, Nov. 22, Treasury Dept., Bureau of Engraving & Printing, 14th & C Sts., S.W., Washington 25, D. C.

Dioctyl phthalate, 3,600 lbs., high quality, for use in conjunction with polyvinyl chloride paste type resin in the formulation of printing inks, one gal. sample required, inv. BEP-61, Nov. 15, Treasury Dept., Bureau of Engraving & Printing, 14th & C Sts., S.W., Washington 25, D. C.

Drugs, 6,240 bxs of 5 phenobarbital sodium injection, USP, 0.324 gm, 2 cc, 1,680 bxs of 10 phenosulfonaphthalene injection, USP, 6 mg, 1 cc, 960 bxs. of 6 progesterone injection, USP, 25 mg. per cc, 10 cc, 3,656 bxs. of 6 testosterone propionate injection, USP, 25 mg., 1 cc, 2,448 bxs. of 10 tetracaine hydrochloride injection, 1%, 2 cc, 20,736 bots. of 6 cc vitamin B_{12} injection USP, 30 mg per cc, overseas pack, Louisville, Ky., inv. 261, Nov. 8, 6,912 bots. of 100 saccharin sodium tabs, USP, 32 mg., 1,672 bots. of 100 santonin tabs, NF, 32 mg., 15,552 bots. of 100 thyroid tabs, USP, 32 mg., 68,554 bots. of 100 same, 64 mg., 360 bots. of 1,000 glutamic acid hydrochloride capsules, NF, 0.3 gm., overseas pack, inv. 260, Nov. 10, 2,556 bxs. of 12 bacitracin ointment, 500 units per gm., ½ oz., potency 36 months, 1,142, 400 bots. procaine penicillin G, crystalline, 300,000 units, potency 48 months, 175,800 bots. same, 1,500,000 units, 327,600 bots. streptomycin, USP, 1 gm., potency 48 months, 37,200 bots. dihydrostreptomycin USP, 1 gm., potency 48 months, 39,600 bots. penicillin G, crystalline, 1,000,000 units, potency 36 months, overseas pack, Louisville, Ky., inv. 253, Nov. 8, 1,080 bxs. of 10 procaine hydrochloride, USP, 100 gm., 864 bxs. of 6 sodium dehydrocholate injection NF, 20%, 5 cc, 7,500 bots. thiamine hydrochloride injection, USP, 50 mg., 5 cc, 1,800 bxs. of 12, neostigmine methylsulfate injection, USP, 1:2000 1 cc, overseas pack, inv. 251, Nov. 8, 26,800 pkgs. of 10 ammonia inhalant solution, aromatic, ampuls, 1/3 cc, 220 pkgs. of 3 ethyl iodophenyl-undecylate ampuls, 3 cc, Louisville, Ky., inv. 263, Nov. 8, 2,544 bots. of 500 secobarbital sodium capsules, 100 mg., 2,136 bots. of 100 tetracaine hydrochloride tabs., 100 mg., 8,736 bots. of 500 thiamine hydrochloride tabs., USP, 5 mg., 9,936 bots. of 100 same, 50 mg., 5,232 bots. of 100 sodium chloride tabs., NF, 2:25 gm., 11,904 bots. of 12 tetrachloroethylene capsules, USP, 1 cc, overseas pack, Lyoth, Calif., inv. 262, Nov. 9, Armed Services Med. Procurement Agency, 84 Sands St., Bklyn. 1, N. Y.; 384 1-oz. bots. thymol iodide, NF, 744 1-lb. jars wool fat, hydrous, USP, (lanolin), 2,952 1-lb. bots. methyl alcohol ACS, 6,456 1-lb. bots. xylene ACS, 576 ¼-lb. bots. tannic acid NF powder, 420 ⅛-oz. bots. pilocarpine hydrochloride, USP, 192 ¼-lb. bots. sulfosalicylic acid USP, reagent grade, 672 1-lb. bots. potassium bicarbonate USP powder, 1,296 1-lb. bots. sodium chloride ACS, Somerville, N. J., Wilmington, Calif., Hines, Ill., inv. A-135-A, Nov. 9, Vets. Adm. Chief, Procurement Div., Supply Service, Vets. Adm. Bldg., Washington 25, D.C.

Gas, oxygen, for period from Dec. 1, 1955 thru Nov. 30, 1956, inv. 191-39, Nov. 14, Charleston Naval Shipyard, Navy Dept., Naval Base, Charleston, S. C.; 29,000 lbs., 145 lb. cyls. dichlorodifluoromethane, freon 12, inv. 6203-A, Nov. 21, Panama Canal Co., Procurement Div., 21 West St., N. Y. 6, N. Y.

Insecticide, 2,992 1-lb. contrs., DDT, inv. RIW-69080-R, Nov. 10, Gen. Services Adm., Business Service Center, Region 3, 7th & D Sts., S.W., Washington 25, D. C.

Paint, 30 5-gal. cans light ivory, interior semi-gloss enamel, 20 5-gal. cans light ivory, quick drying, interior gloss enamel, for metal, 20 5-gal. cans white, flat, quick drying, undercoat paint, for metal, inv. 111, Nov. 8, Vets. Adm. Center, Supply Officer, Martinsburg, W. Va.; 6,936 qts. synthetic gloss air drying enamel, East & West Coast, inv. 383-314, Nov. 18, 15,704 gals. same, inv. 383-441, Nov. 18, 14,400 gals. asphalt varnish, 7,150 gals. interior oil varnish, 4,500 qts. general purpose, phenolic oil varnish, 500 gals. orange, heavy body (#3) shellac, varnish, 1,050 gals. same, medium body (#2), East & West Coast, inv. 383-402, Nov. 17, 43,084 lbs. paste aluminum pigment, East & West Coast, inv. 383-426, Nov. 22, 43,600 gals. general purpose, exterior, oil paint, East & West Coast, inv. 383-424, Nov. 22, 2,304 gals. camouflage seaplane gray lacquer, inv. 383-390-B, Nov. 23, Aviation Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Sodium metasilicate, 340 lbs., gran., inv. 4, Nov. 10, San Francisco Chem. Procurement District, 1515 Clay St., Oakland 12, Calif.

Trisodium phosphate, powder, cleaning, for period from Jan. 1, 1956 thru Dec. 31, 1956, inv. 6160-A, Nov. 15, Panama Canal Co., Procurement Div., 21 West St., N. Y. 6, N. Y.

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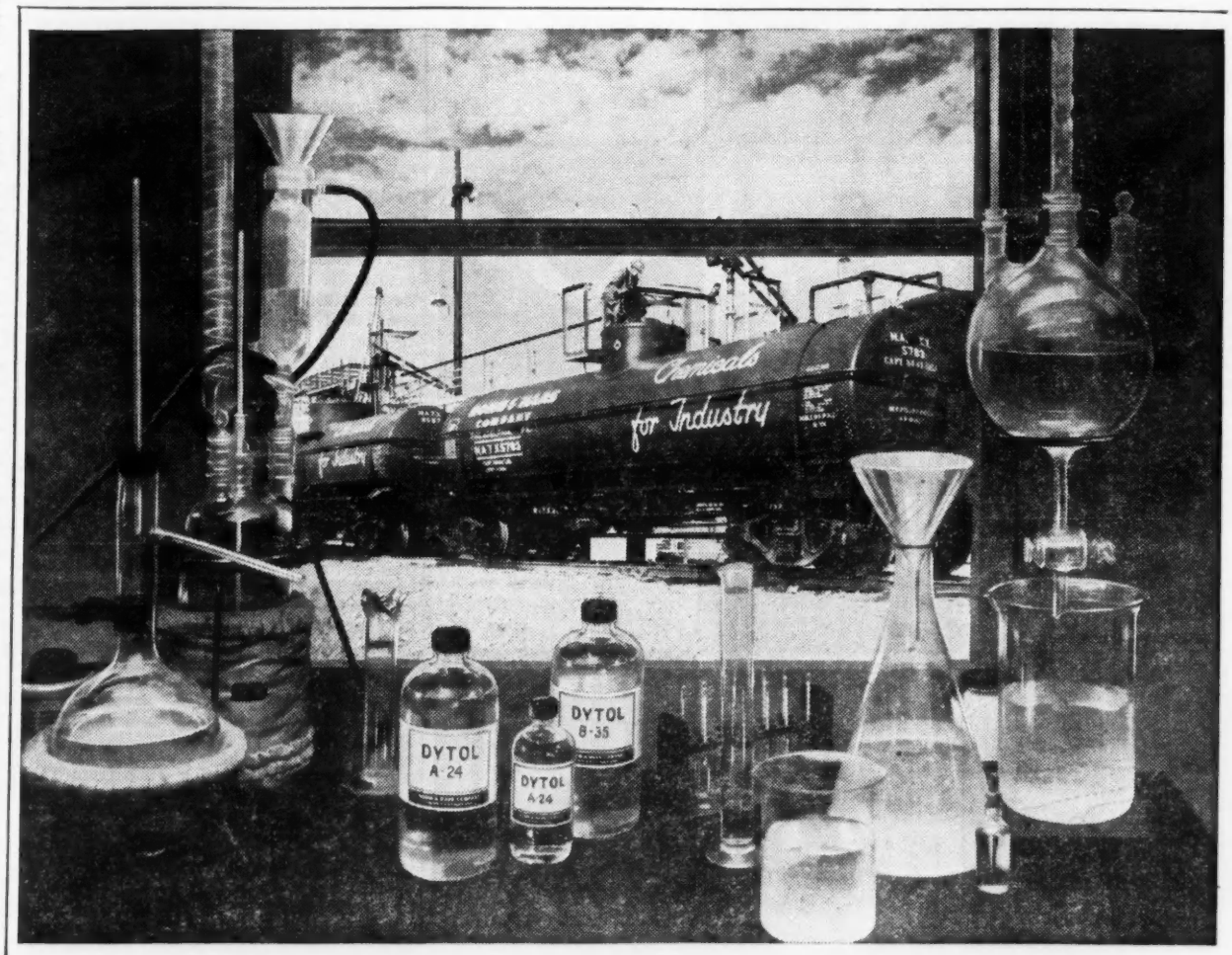

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% Stearyl (C_{18})	none	0.5	62.0

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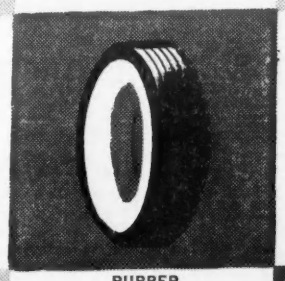

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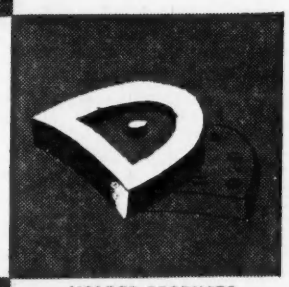

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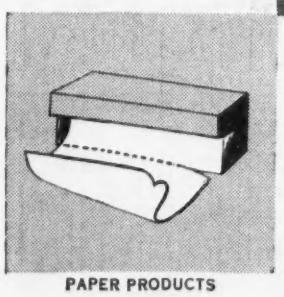

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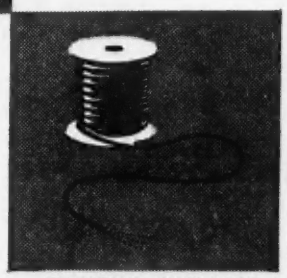

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Coal Chemicals

Several unrelated influences were combining to stabilize the price pattern in coal chemicals as technological developments gave promise of even wider markets for many of the chemicals in this category. Production was at or near capacity in most cases. Several products could count on a steady market in relatively small volume. For those few by-products of steel production for which no large-volume outlets have been found, at least it could be said that they were in no worse position last week than they have been in the recent past.

Producers were holding prices down to current levels as new or expanded applications developed and demand strengthened. The emphasis was on trade in bigger volume rather than increased unit profit.

Naphthalene and benzol, and their respective derivatives, such as, phthalic anhydride and styrene monomer, figured in large volume business. Brightened prospects were seen for di-tert-butyl-p-cresol and resorcinol. There was a healthy market also for cersol, cresylic acid and phenol. Catechol and G salt enjoyed a stable market position in limited trading volume.

Some creosote was going into inventory, but it fared no worse last week than it has in recent months. Trade in pyridine was slow also, but cost factors apparently stabilized the price of this item.

The American Iron and Steel Institute estimated steel production for the week ending November 6 at 98.1 percent of theoretical capacity. This is equivalent to production of 2,367,153 tons of steel, as against 2,413,000 tons produced in the previous week, 2,334,000 tons one month ago and 1,822,000 tons made a year ago.

Basic Products

Benzol—Demand continued to mirror the fast pace of business activity in general and the strong position of phenol and styrene monomer in particular as production continued to climb. The two factors combined to hold the benzol market in even balance. Benzol prices appeared to be firm all along the line.

The U. S. Tariff Commission reported that the combined output of tar distillers, and coke-oven and petroleum operators during August amounted to 23,746,486 gallons, compared to total output of 23,614,135 gallons in the previous month. The break-down indicates increases in August production over that for July from 13,047,320 to 13,502,373 gallons on the part of the coke-oven operators and from 1,734,427 to 1,778,480 gallons by the tar distillers. The figures indicate production by petroleum operators dropped from 8,832,388 gallons in July to 8,465,633 gallons in August.

Creosote—Prices stood firm as the market picture for creosote oil remained unchanged. Supply was ample, and some of the material was going into inventory. Trade in this product remained rather sluggish.

Figures released by the U. S. Tariff Commission indicated a fairly sharp increase in production from 8,538,014 gallons in July to 11,539,037 gallons in August. Percentagewise, cokeoven output showed the greatest increase, advancing from 2,029,783 gallons in July to 3,158,225 gallons the following month. The tar distillers turned out 6,508,231 gallons in July, compared to 8,380,812 gallons in August.

Cresol—Demand for cresol-formaldehyde resins gave no sign of a let-up from the strong pressure it has been exerting in recent months, and the meta-para fractions of cresol were moving into consuming channels as fast as they were being produced. The supply of the ortho fraction was in abundance with production at a fair level. Prices were firm.

The U. S. Tariff Commission reported a total of 3,087,801 pounds of cresols produced in August, compared to 2,559,085 pounds output in the month previous. An increase appeared in all fractions. Output of the meta-para fractions was 2,036,467 pounds in August, compared to 1,976,799 pounds in July, while production of the ortho fraction increased from 582,286 pounds in July to 1,051,334 pounds the following month.

Cresylic Acid—Powerful demand for low-boiling grades characterized a healthy market last week in cresylic acid. Producers of resins and plasticizers were taking all they could get. Output continued to reflect the steel industry's confident pace. High-boiling grades, supported by strong demand for disinfectants, and engine cleaners, were moving well. Prices were firm at the former levels.

Naphthalene—Industrial demand for the manufacture of phthalic anhydride going into such large volume end uses as alkyd resin and plasticizer manufacture, kept a heavy pressure on the domestic naphthalene producers. Domestic production continued at a high rate, and represented the main source of supply to all users at a reasonable price level.

The relief of stress and strain on domestic production that is usually afforded by imported naphthalene, was not existent except on previously committed long term contracts. Spot material from import sources was very tight, and characteristic of the import market, demanded a high price at a time when domestic supply was in an essentially sold out position.

Part of the demand for high prices on imported material was said to be due to heavy demand in the producing foreign countries for their own material making supplies available for export short. However, it was felt in certain quarters that part of the high price pattern was the need for the material here, because foreign sellers operate in a trading market more sensitive to the law of supply and demand, than the domestic market where production is sold at a price designed to yield a reasonable but narrow margin of profit, and is not jacked up just because supplies are tight.

The Tariff Commission reported production in July as totaling 45,540,903 pounds of all grades from all sources. Of this total, 21,859,871 pounds was crude material produced by tar distillers and 8,808,258 pounds was refined material produced by tar distillers. Coke oven operators turned out 14,872,774 pounds of crude.

Overall naphthalene production in August amounted to 45,675,179 pounds. Tar distiller output of August crude was 23,164,498 pounds, and refined output the same month was 6,893,359 pounds. Coke-oven operators in August turned out 15,617,322 pounds of crude.

Phenol — Synthetic was in balance in general. The demand for production of nylon via caprolactam was well sustained, and other end uses were drawing well. Resin and plastics demand for synthetic was at a high level. Natural grades found a lively market for the entire output. Production was geared high, and prices were steady in all categories.

The U. S. Tariff Commission reported total production in August of both natural and synthteic phenol was 31,154,714 pounds, compared to production in the month previous of 33,764,744 pounds.

Pyridine—Demand for 2 degree material lagged in the market last week, but was no worse in this respect currently than it had been over recent months. Price patterns established some months ago were at about as low a level as was feasible from a cost standpoint, and were not likely to be reduced further.

Toluol—Government purchases, dye intermediates and paint and varnish con-

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
114.79	114.79	114.79	114.56

(For Current Prices see Page 9)

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Nov. 6 was as follows:—

Ammonium liquor, NH_3	lbs.	1,106,825
Ammonium sulfate	lbs.	39,945,575
Benzol	gals.	3,823,453
Coaltar	gals.	17,519,460
Creosote oil	gals.	980,331
Naphthalene, crude	lbs.	2,703,816
Pyridine, refined	lbs.	23,461
Toluol	gals.	752,641
Xylol	gals.	200,810

For Late Market Developments, See Page 4

tinued to maintain a fair demand for toluol, but production was at a high rate, and there was some looseness in this market. Prices appeared to be firm.

August output from all sources, the U. S. Tariff Commission reported, was 15,639,103 gallons, including 3,171,784 gallons produced by cokeoven operators and 12,467,319 gallons turned out by all other producers. The figures compare to 3,040,048 gallons produced in cokeovens and 12,687,716 gallons from all other sources in July, or a total of 15,727,764 gallons produced in that month.

Xylol—The combined coaltar and petroleum source output of xylol in August was reported by the Tariff Commission as amounting to 10,551,955 gallons, slightly above the July production figure of 10,198,576 gallons. Demand was reported as strong particularly as a solvent in industrial finishes and in the manufacture of synthetic resin solutions used in industrial finish manufacture. New automotive demand, following the model changeovers now underway, was expected to contribute to a sustained strong demand.

Dyes

Chrome Blue Black—C.I. 202 blue black R production in August amounted to 101,076 pounds, as against the July output of 134,432 pounds. Demand was reported as fair in a relatively quiet market. No change for the balance of the year was expected in the currently established price levels.

Direct Black EW—C.I. 581 color was produced in August at the rate of 355,870 pounds, compared with production in July amounting to 356,625 pounds. Consumption has been at a steady rate, against a quite adequate supply position.

Intermediates

Aniline—Market conditions were unchanged last week on this item as demand continued brisk under a firm price position. The Tariff Commission reported August production as amounting to 9,612,948 pounds, compared with the July output of 9,421,407 pounds.

Cassella Acid—Price quotations on a 100 percent basis, marketed as the monosodium salt having a molecular weight of 325, stood firm at $1.44 per pound. Demand was steady against quite adequate supply and prices were expected to hold firm for the balance of the year.

Catechol—Trade in this item was steady in small volume. Catechol was finding a market in fur dyes, synthetic fibres and as an ultraviolet screening agent. Prices were firm and steady.

2,6-Di-tert-butyl-p-cresol — Already strong, the market for this intermediate was apparently widening. For one thing, it is one of the fuel additives that is entirely consumed in burning, and seems to be, among the chemicals now on the market, unique as an anti-oxidant. Some chemists believe it has a marked synergistic effect when used with certain other gasoline additives such as TCP. A dependable minor outlet has been provided through its acceptance by the Food and Drug Administration for use in foods. This outlet is not expected to account for heavy volume sales, however, since only 0.01 percent di-tert-butyl-p-cresol is necessary in fatty foods. Last week production was at capacity, demand very strong, and supplies were tight. Prices were firm.

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to capitalize on the expanded potentialities here by way of making the most of increased sales volume rather than by imposing any price increases.

G-Salt—There was a steady, relatively small volume demand for this item as a dyestuffs intermediate. Marketed on a potassium salt basis, having a molecular weight of 380, G-salt was listed at 67c. per pound, quoted on a 100 percent basis. No change was expected for the balance of the year.

J Acid—Though some small producers were marketing J acid (6-amino-1-naphthol-3-sulfonic acid) at shaded prices here and there, market price of $2.45 per pound, 100 percent basis, at the works, was prevailing.

Maleic Anhydride—This item continued to move in good volume, mostly in its easier to handle physical forms, such as pellets, which reduce the dusting problem. Maleic modified resins of both the rosin modified and alkyd types accounted for most of the buying interest, especially those in which pentaerythritol was a partially used polyol. Prices were firm and unchanged.

Phthalic Anhydride — Some producers looked for a mild adjustment in this market in the middle of last month in the form of a temporary slackening of demand, which has been tight for many months. It didn't materialize. Phthalic continued as in the past to move directly into consumer channels, most of it going into alkyd resins. The supply was abundant, reflecting the high-level of naphthalene production. Prices were firm.

The U. S. Tariff Commission reported phthalic anhydride production in August amounted to 29,734,627 pounds, compared to 31,582,397 pounds in the month previous.

Styrene Monomer — Producers continued to do a booming business in this intermediate. Synthetic rubber outlets were the mainstay of the market. Styrene was also moving in good volume into the manufacture of polystyrene plastics and polyester laminating resins. Influences at work now were counted on to maintain the good complexion of this trade for some time. Last week production was brisk, demand was excellent, prices were steady.

The U. S. Tariff Commission recorded August production of styrene in privately owned and government plants, combined, at 92,722,599 pounds. The comparable figure, for July, was 88,415,197 pounds.

Amsco Vice-Presidencies Go to Capizzano, Buckley

John E. Capizzano and John J. Buckley have been elected assistant vice-presidents of American Mineral Spirits Company, Chicago.

Mr. Capizzano joined Amsco in 1934 at the company's testing laboratory at Carteret, N. J., and later became director of the laboratory. Following World War II he was moved to Amsco's eastern sales headquarters in New York as a technical sales representative for industrial naphthas and solvents. Later he was named operations manager for Amsco's sales department. In 1954 Mr. Capizzano was promoted to Eastern Sales Manager, responsible for the sale of Amsco's complete line of petroleum solvents.

Mr. Buckley joined Amsco in 1936. He was employed as a statistician and later became a salesman in the company's wholesale fuel oil department. During World War II he was active in the Fuel Oil rationing program on the eastern seaboard. He was appointed manager of the fuel oil department of Amsco in 1947. Prior to his election as assistant vice-president he was in charge of the company's wholesale fuel oil operations in the greater New York market area as well as Boston and Providence.

Barrett Fills Managerial Berths in Research Dep't

Barrett Division, Allied Chemical & Dye Corporation, New York, has made three top-level appointments in its research and development department.

Dr. Maurice H. Bigelow, formerly director of the Glendale Plaskon Laboratory in Toledo, Ohio, has been appointed to the newly-created post of director of research.

David E. Cordier has been made director of the Glendale Plaskon Laboratory. He formerly was supervisor of research there. James B. Maguire has been named director of development. For the past three years he has been director of the Glenholden, Pa., research laboratory.

Haskell Entering Plastics Field

Haskell Chemical Company, Richmond, Va., will build a new plant at Dumbarton, Va. Howzie Haskell, president, said the firm plans to go into the manufacture of synthetic resins about the middle of next year.

Tung Nut Price Support Is Set at $51.06 Per Ton

Prices of the 1955 crop tung nuts will be supported at the rate of $51.06 per ton to growers by the Department of Agriculture, it was announced last week. The equivalent support rate for tung oil will be 20 cents a pound.

The new support price for the nuts, which is on the basis of 18.5 percent oil content, is 60 percent of the parity price of $85.10 per ton for the nuts as of November 1, 1955, and is 36 cents above the minimum level of support announced October 11. The support rate of 20 cents per pound for tung oil is 0.1 cent above the preliminary rate announced earlier.

Tung nuts from the 1954 crop were supported at $54.96 a ton, which was 60 percent of parity, and the equivalent price for tung oil was 21.2 cents a pound.

The 1955 support program will be implemented through purchase agreements on tung nuts and purchase agreements and loans on tung oil. Purchase agreement on tung nuts will be available from November 1, 1955, through January 31, 1956, and the purchase agreements and loans on oil from November 1, 1955, through June 30, 1956. Loans on the oil will mature October 31, 1956.

Starch Producers Get Loan For Purchasing of Potatoes

A group of small starch manufacturing firms in Maine was granted a "pool loan" of $700,000 last week by the Small Business Administration. The loan will be used to assist the nineteen member firms in purchasing potatoes to be manufactured into starch.

This is the first "pool loan" made by the agency under an authorization granted by congress last session. Prior approval of such loans must be received from the Attorney General and the Federal Trade Commission to prevent any conflict with the antitrust laws.

The Maine Starch Sales Company, Presque Isle, Me., which made application for the loan, said that the current potato crop is substantial and that sufficient potatoes will be available to manufacture about 45,000 tons of potato starch as compared with 21,000 tons produced last year. The loan is for an eighteen-month period and bears interest at 5 percent.

Chemical Packaging

—*Continued from page 4*

strong outside containers are now exempt from specification packaging, marking, and labeling requirements. When offered for transportation by water, the name of the contents must be marked on the outside container, and when offered for transportation by rail express, must also bear the red label. The gross weight of paints shipped in fiberboard boxes must now exceed sixty-five pounds.

Cements specified in section 73.132 must now be packed in specification containers.

Glass bottles may be used as inside containers for ethyleneimine, inhibited.

Specifications for packing methyldrazine and unsdimethylhydrazine now permit the use of inside containers of one-gallon glass bottles or aluminum containers of two-quart capacity.

Packing of glass or earthenware containers of phosphorus pentachloride in metal cans is now no longer required under certain conditions.

The classification of methylhydrazine and uns-dimethylhydrazine is changed from a corrosive liquid to a flammable liquid requiring a red label instead of a white label.

Hydrogen Peroxide Rules Clarified

Packaging requirements contained in section 73.266(b), (c) and (d) for hydrogen peroxide are clarified.

Specification strengths of sulfuric acid in 5A or 5C containers are clarified in section 73.272(g)(1).

Specification 103AW stainless steel tankcars may be used for transporting formic acid, and specification IEX containers may be used for formic acid in domestic service.

Packaging requirements are set out in section 73.293 for iodine monochloride.

The exemption for containers of nonpoisonous and nonflammable compressed gases provided for in section 73.302 was extended from 16.6 fluid ounces to 17.6 fluid ounce capacity.

Cylinders having service pressures of 225 and 150 p.s.i. may be used for vinyl chloride, inhibited.

Provision is made for shipment of chlorine in MC330 cargo tanks.

The maximum percentage of active ingredient for certain poisons specified in section 73.334 is increased to 20 percent and provision is made for shipping the poisons in specification 4B240ET cylinders.

Sections 73.354, (a) (4), (5), and (c) are clarified to prohibit certain tankcars and tank motor vehicles for shipment of tetraethyl lead.

Domestic shipments of dangerous goods by air must now be covered by duplicate certificates from shippers certifying that the contents of the package are properly described by name and are packed and marked and are in proper condition for transportation according to ICC and Civil Aeronautics Board regulations.

ODM Director Asks

—*Continued from page 5*

if present programs are carried out, of 50,000 barrels a day. This is approximately 7 percent above the committee recommendation and is under 1 percent of total crude oil demanded.

"Leaving aside certain unevaluated information recently received, it is clear that certain importing companies have made commendable efforts to follow the committee recommendation, including importers of oil from Venezuela who, we understand, have been encouraged in this effort by the Venezuelan government. Nevertheless, these efforts have not been sufficient to bring actual and scheduled imports of crude oil into a satisfactory relation to the committee standard."

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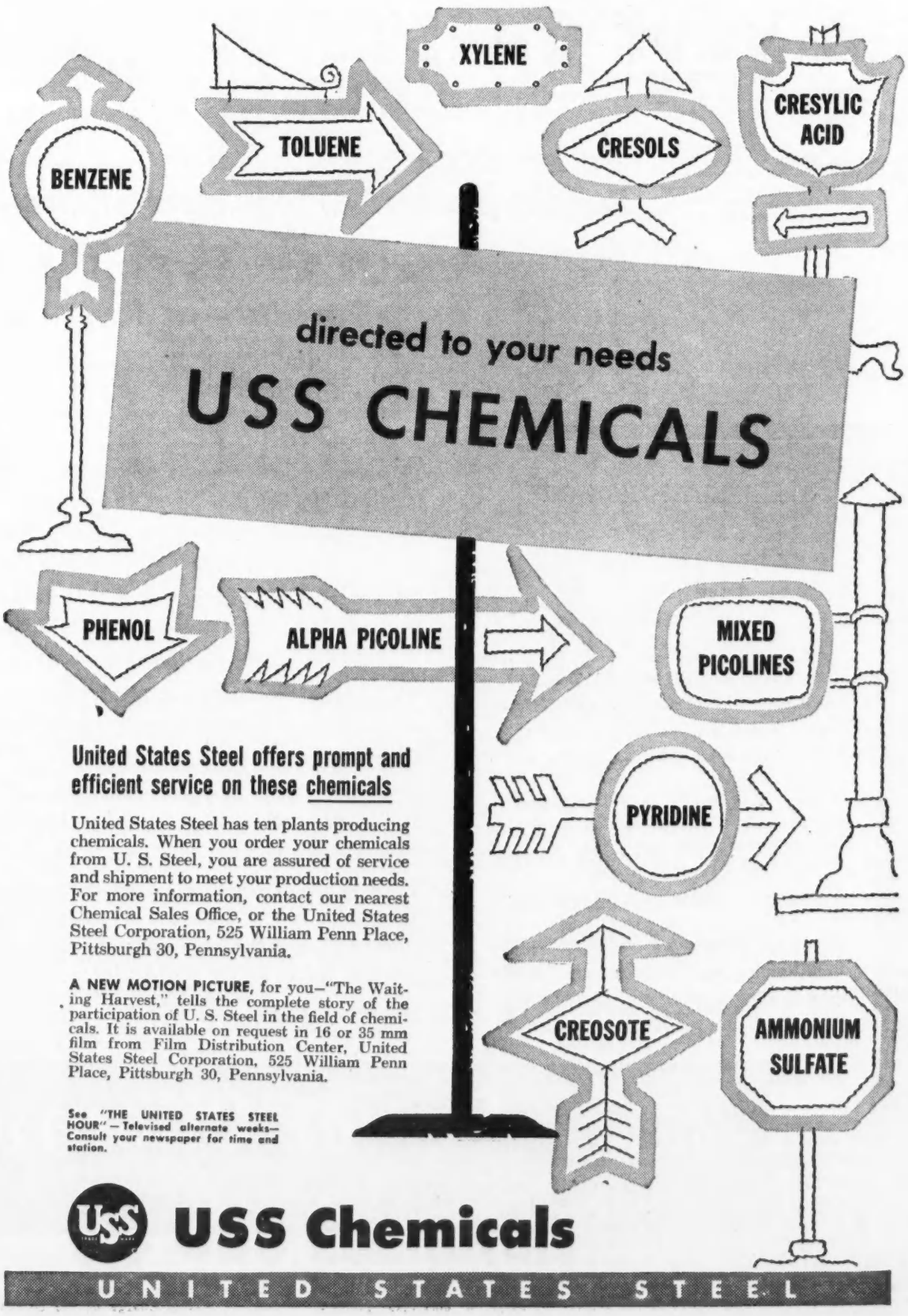
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The market was quiet last week with no price changes reported. Effective November 30, 1955, the grade designation of calcium lactate, USP, will be replaced by calcium lactate, NF. The USP designation will no longer be used in the trade in accordance with a recent decision of the U.S. Pharmacopeia. The change will not include any change in quality or specifications for calcium lactate of this grade. In other words NF material will be identical with current USP graded calcium lactate.

A number of items going into seasonal outlets were reported moving in good call. Pectin was said to be in very heavy demand with considerable quantities going into the food processing industries particularly jams and jellies, in addition to confectionary. The harvest season is still under way and combined with the approach of the Christmas season was expected to keep pectin consumption at a continuing high level. Supplies while adequate on the overall, were in some instances, temporarily short with some delays in shipments reported.

Aspirin (acetylsalicylic acid) was said to be running at a brisk seasonal level. Aspirin is perhaps the prime drug ingredient used to combat the common cold, it was said. Prices were firm while supplies were adequate. Caffeine was moving at a steady level as were the tartrates, cream of tartar and tartaric acid. The latter two items were in brisk seasonal demand with spot prices very firm in view of the continued strength in raw material costs abroad.

Synthetic vitamins appeared to be moving satisfactorily, on the whole, although, demand could be better in certain of them, it was said. Consumption of synthetic vitamin A by margarine makers continues to be perhaps the greatest outlet for this vitamin. It is, of course, consumed in substantial quantities along with other vitamins in the formulation of multi-vitamin compounds. The increased emphasis upon vitamin supplementation in diet and on geriatrics has resulted in steadily rising demand for the vitamin group, it was said.

Acetanilide—Demand for USP grade acetanilide was reported to be running at routine levels. Supplies were reportedly adequate to meet trade requirements while prices held unchanged.

USP grade acetanilide goes into a number of limited applications, virtually all in the drugs line. It is used by some pharmaceutical makers in the formulation of various analgesic compounds.

Acetylsalicylic Acid—Inquiry for acetylsalicylic acid was reported to be running at a good seasonal pace. Consumption of aspirin, on the consumer level, is considerable the year-round but increase during the cold weather months due to the higher incidence of illness, most particularly the common cold. Aside from its use when taken by itself, aspirin is also an important component of a host of various analgesic and antipyretic compounds it was noted. Supplies were adequate to cover current trade needs and barring any heavy rise in consumption should suffice to meet pharmaceutical requirements in the immediate future. Pricewise there was no change noted. The last change in the price quotations was in December last year.

Production of acetylsalicylic acid totaled 912,049 pounds in August, 1955, according to the United States Tariff Commission. By comparison, production of aspirin in July amounted to 1,099,040 pounds.

Ascorbic Acid—Inquiry for ascorbic acid was reported to be at good levels. Aside from a heavy demand from manufacturers of vitamin compounds, the frozen food industry accounts for a substantial proportion of the ascorbic acid consumed. In this latter industry it is used in substantial quantities in conjunction with citric acid, as an anti-oxidant. The steadily growing emphasis on vitamin supplementation of the diet has led to a rise in the use of ascorbic acid and other vitamins essential in multi-vitamin preparations.

The supply situation in ascorbic was reported to be an adequate one. No difficulty was anticipated in continuing to meet current needs of the pharmaceutical and frozen food industries, the principal users of ascorbic acid. Production capacity has been estimated to be sufficient to meet any normal increase in the demand for this vitamin, it was noted. Prices were steady with no changes anticipated in the immediate future.

Production of ascorbic acid and salts in bulk amounted to 96,724 pounds in August compared to 180,033 pounds turned out in July this year, according to the Tariff Commission.

Ethyl Ether—Demand for USP ethyl ether was reported to by moving at routine levels. Supplies were ample to cover consumer requirements and expected to continue. Prices were unchanged.

Production of ethyl ether, USP and technical grades combined, amounted to 5,691,553 pounds in August compared to 5,402,907 pounds in July, according to the most recent report of the United States Tariff Commission.

Molasses—Demand for feed molasses in the New England area improved during the week ending November 1, 1955. The dairy industry in that area has increased its consumption of molasses feeds as a delayed seasonal pickup was reported. Mild fall weather and favorable pasture conditions have prevailed during recent weeks. Demand in other areas continued steady except in the Gulf region. Blackstrap demand in New Orleans remained moderate to slow at a price of 10 to 14¼c. per gallon. Feed molasses prices were steady and unchanged at most other terminals.

Supplies of cane blackstrap were adequate at all points except Jacksonville, while beet and citrus molasses continued in very short supply. Citrus fruit processing is increasing steadily and molasses will be on the market in about two or three weeks. It is expected that a large amount of citrus molasses will be combined with pulp, thus reducing the available amount of liquid molasses for livestock feeding. Demand for beet and citrus molasses was generally good to strong in production areas.

Niacin — Inquiry continues at routine levels. Considerable niacin is used in the fortification of cereals and flours. This use appeared to have increased in some directions. The pharmaceutical industry also consumes a substantial, if not the greatest quantity of niacin. The steadily growing usage of multi-vitamin compounds on the consumer level, was reflected in steady inquiry for niacin.

Supplywise, there appeared to be no difficulty in meeting consumer needs while prices continue steady and unchanged. The Tariff Commission reported that production of niacin and niacinamide in August totaled 110,466 pounds compared to 140,562 pounds in July, 1955.

Pectin—Demand for pectin was particularly heavy, according to producers. Several factors entered into the situation, it was noted. With the harvest season not over and confectionary manufacture for the Christmas season in full swing, the consumption of pectin was proceeding at a high level. While there was no actual shortage, there were occasionally some temporary shipment delays, it was said.

Penicillin—Demand was seasonally up while prices were firmer. Supplies were adequate to cover trade requirements.

Production of penicillin and salts (bulk material only) amounted to 22,386,010,000,000 International units in August compared to 19,910,701,000,000 units in July. These statistics were reported by the United States Tariff Commission.

Silver Nitrate — The Bureau of the Census reported production of silver nitrate 100 percent $AgNO_3$) as to have aggregated 4,085,000 ounces during August compared to 5,086,000 ounces in July and 4,224,000 uonces in August last year.

Stocks of silver nitrate at producing plants totaled 3,296,000 ounces on August 31, 1955, compared to 4,329,000 ounces on hand July 31.

Streptomycin—Inquiry for streptomycin was reported to running at seasonally steady levels. Prices have firmed up to some extent as a result of the stepup in consumption resulting from seasonal influences. The use of streptomycin in ap-

For Late Market Developments, See Page 4

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
66.42	66.42	66.42	66.96

(For Current Prices see Page 9)

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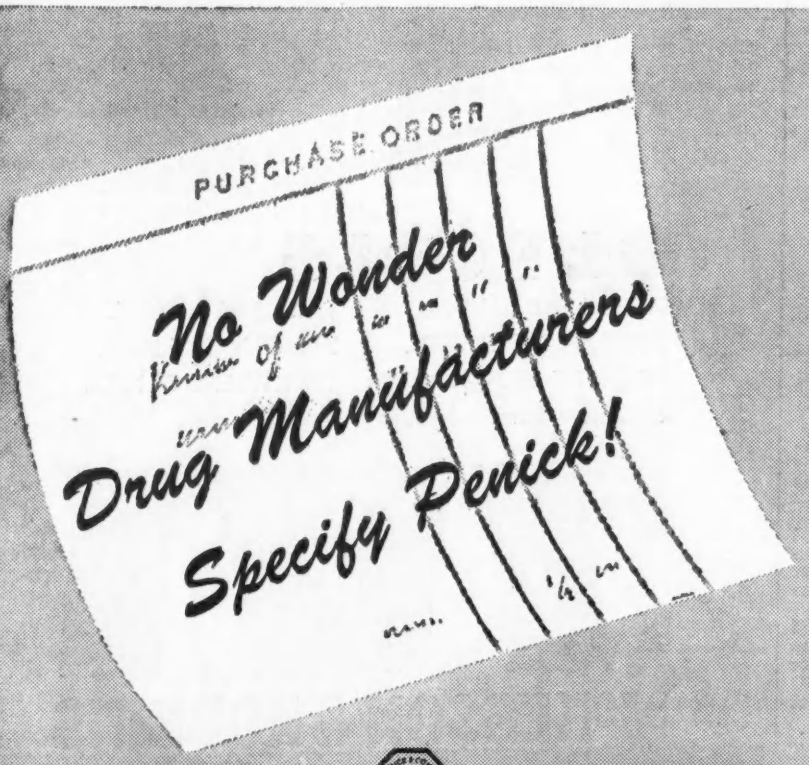

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plications other than human medicine has also increased, particularly with reference to the treatment and prevention of plant diseases. This latter usage was expected to continue to expand since the use of streptomycin has already proven itself effective in curtailing losses due to diseases in several commercially grown plants.

The Tariff Commission reported that production of streptomycin totaled 4,603,653 grams in August compared to 4,410,349 grams during July this year. Production or dihydrostreptomycin aggregated 11,209,126 grams in August compared to 11,166,456 grams in July.

Sulfa Drugs—Demand for the sulfonamides was reported moving at routine levels. In combination with other drugs, the sulfas have regained some of their former prominence and producers were enthusiastic toward continuing popularity of these drugs.

Pricewise, there were no changes nor any anticipated in the immediate future. Supplies were adequate and expected to continue. Overall productions of bulk sulfa drugs in August totaled 136,417 pounds according to the United States Tariff Commission, while production in July amounted to 153,161 pounds.

Thiamin Salts—Inquiry was said to be running at steady levels. Supplies were ample to cover trade needs and expected to continue in the immediate future. Prices were steady.

Production of thiamin derivatives (B_1) in August of this year amounted to 7,833 pounds according to the Tariff Commission compared to 14,025 pounds turned out during July.

Botanicals

The spot market held unchanged last week with inquiry reported to be moving at a seasonal pace. Supplies of virtually all domestic botanicals were adequate for current consumer needs and were expected to remain ample barring any unusual increase in usage. The current price pattern was expected to hold without much change during coming months.

Collection of the 1955 botanicals crop added considerably to existing carryover stocks from the previous year. A report from primary collection sources stated that, on the whole, prices paid to collectors were slightly below those of the preceding year and as a result, consumers could generally expect little if any rise in prices. Although the labor supply for botanicals collection was somewhat smaller due to increased production in the coal mines and in furniture factories which left fewer unemployed in southern areas, nevertheless, it was sufficient to meet the need. According to reports, botanical buyers were more selective this year, buying fewer items and eliminating from their inventory lists many slow moving items for which demand has dropped. This new buying policy was expected to ultimately reduce primary market inventories appreciably. In the future, it was said, there will be more emphasis on those items for which there is a ready market, this cutting down on the stock of items for which inquiry is only spotty and more subject to price.

A survey of botanical collections in various areas illustrates the effects had upon the size of the collection by factors such as weather conditions, buying prices and the increased availability of jobs in the coal mines. In Western Virginia, the crop was reported excellent. Buyers' prices were attractive and there was no shortage of collectors with the result that botanical gathering in that area was sufficient to meet virtually all outstanding contracts. In eastern Kentucky, however, there was a considerable drop in collections attributed largely to a shortage of collectors. There was sufficient work in the mines to employ a large segment of the miners in that area thus leaving botanicals collections mostly to either the very young and aged.

Mandrake Root—The spot market continued firm and was expected to remain strong in the months to come. Although collection of mandrake was poor in certain areas this year, it was, on the other hand, reported to have been substantial in other primary markets. Prices were firm.

Senna Leaves—There was no change in this market. Supplies were ample to cover current needs and inquiry was routine.

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Titanium Metal Sponge Reduced Again by duPont

Further reductions in the price of titanium metal sponge and improved quality specifications for top grade material, have been announced by E. I. duPont de Nemours & Co., Wilmington, Del. The price of grade A-1 sponge has been reduced from $3.95 to $3.75 a pound; grade A-2 from $3.50 to $3.25, and grade A-2 fines, from $3 to $2.75.

The new schedule constitutes du Pont's fourth price reduction in titanium in less than two years. Improvements in quality of Grade A-1 sponge include specifications calling for a lowering of the Brinell hardness number to a maximum of 125.

Plasticizer Being Offered By Carbide in Tankcars

"Flexol" plasticizer 10-A (didecyl adipate) is now available in tankcar quantities from Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation. Decyl alcohols used in the production of this new plasticizer are produced in Carbide's new Oxo unit at Texas City, Tex. Prices of "Flexol" 10-A are 42.5 cents per pound in tankcar quantities, 44.5 cents per pound in carload lots of drums, and 45.5 cents per pound in less than carload lots of drums. All prices are f.o.b. delivery point of rail carrier in the United States.

Soviet Seen Making Push

—*Continued from page 5*

scrap, it was reported by Joseph Green, research organic chemist with the U. S. Rubber Reclaiming Company, Buffalo, N. Y.

Four classes of the new rubber have been made, depending on the type of scraps used as raw material and the particular chemicals mixed with them, he said.

Dr. Ray P. Dinsmore, vice-president in charge of research and development for Goodyear Tire & Rubber Company, received the 1955 Charles Goodyear medal at a banquet in his honor.

The Goodyear award, founded in commemoration of Charles Goodyear's discovery of the vulcanization of rubber in 1939, is given annually by the division to spur interest in basic research in rubber.

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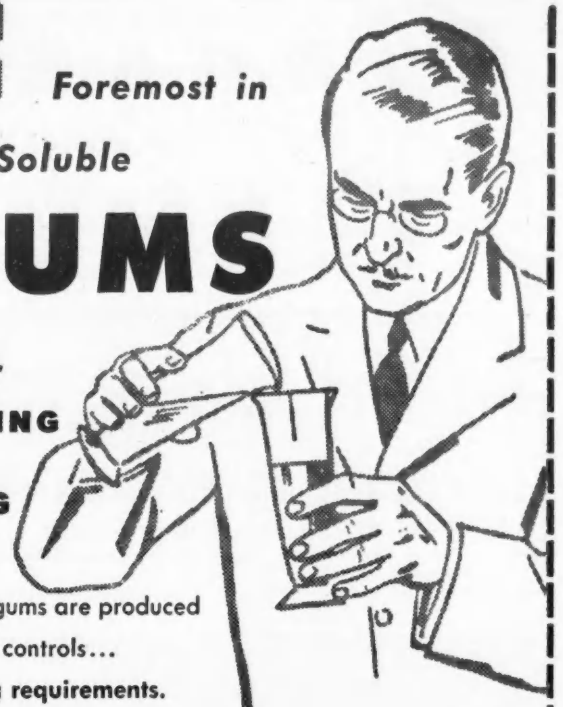

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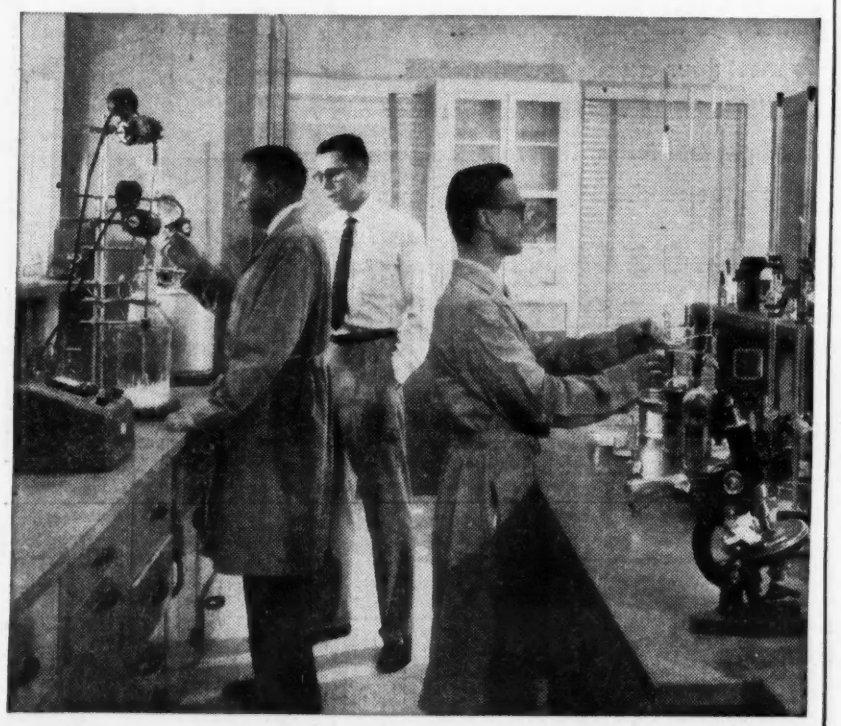

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Cyanamid, Shell Petitions Filed Under Miller Law

The first of several petitions under the Miller pesticide law, proposing to set tolerances on residues of antibiotics used for food preservation, were announced last week by the Food and Drug Administration.

The agency said that a petition has been filed by American Cyanamid Company, New York, proposing to fix a tolerance of twenty-three parts per million for residues of chlortetracycline in or on dressed poultry (not cooked).

Use of antibiotics as food preservatives has been under study for months by the manufacturers of these drugs and other petitions will be filed shortly proposing tolerances for other antibiotics used for food preservatives.

FDA also announced the filing of a petition by Shell Chemical Corporation, New York, proposing tolerances for residues of aldrin and dieldrin used as pesticides on a long list of raw agricultural commodities.

FWDA Sets 1956 Meeting

The Federal Wholesale Druggists' Association has announced that its 1956 convention will be held September 16 through 19 at the Greenbrier hotel in White Sulphur Springs, W. Va.

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Meclizine Hydrochloride On Over-the-Counter List

Meclizine hydrochloride, a drug used in the prevention of motion sickness, has been added to the growing list of drug preparation which will be available without a prescription. The Food and Drug Administration announced last week that after December 1 this drug may be sold over-the-counter.

The chemical name of the drug is 1-p-chlorobenz - hydryl - 4 - m - methylbenzyl-piperazine dihydrochloride. Over-the-counter sales of the drug are to be limited to not more than twenty-five milligrams of mechlizine hydrochloride per dosage unit. The labeling will state that adults should not take more than fifty milligrams of the drug per twenty-hour period, while children from six to twelve should be limited to doses of half this amount.

The labeling will also carry warning statements against exceeding the dosage recommended; against giving it to children under six years of age, except as directed by a physician; against driving a car or operating machinery while using the drug, since it may cause drowsiness; and it should be kept out of reach of children, if it is in candy form.

Labor Dep't Post Filled

Clarence T. Lundquist was appointed deputy administrator of the wage and hour and public contracts divisions of the Department of Labor last week. Mr. Lundquist previously was a deputy director of legislative programs in the Department of Defense.

Trade Briefs

Hart Products Corporation, New York, has named Dr. Sidney Cohen director of the research and development laboratory.

B. F. Goodrich Company, Akron, Ohio, has added Kornelijs Dinbergs to the staff of its research center at Brecksville, Ohio.

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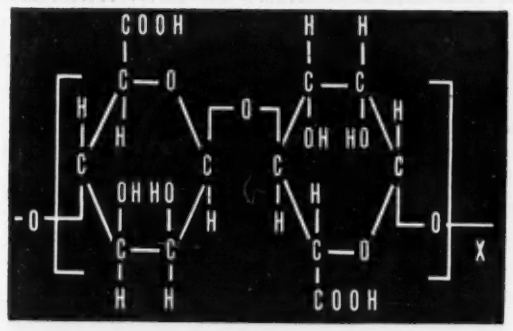

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ANILINE DYES—2 dms, L & R Organic Products Co, Rotterdam
36 dms, Carbic Color & Chemical Co, Rotterdam
28 dms, Sandoz Chemical Works, Havre
73 dms, Sandoz Chemical Works, Havre
2 dms, Rotterdam
ANTHRACENE—14 bbls, F L Kraemer, Rotterdam
ANTIMONY REGULUS—50 cs, C Gitlan, Antwerp
ARABIC GUM—1,000 bgs, Agalec Trading Corp, Port Sudan
254 bgs, Tragacanth Importing Corp, Port Sudan
150 bgs, Morningstar Nicol, Port Sudan
250 bgs, T M Duche & Sons, Port Sudan
50 bgs, Chase Manhattan Bank, Port Sudan
250 bgs, Irving Trust Co, Port Sudan
80 bgs, Manufacturers Trust Co, Port Sudan
512 bgs, National City Bank, Port Sudan
500 bgs, Guaranty Trust Co, Port Sudan
ARGOLS—500 bgs, Messina
ASBESTOS FIBER—4,000 bgs, North American Asbestos Corp, Lourenco Marques
600 bgs, Bankers Trust Co, Lourenco Marques
ASCORBIC ACID—8 dms, Foster T Smith, Yokohama
13 cs, R J Saunders & Co, Yokohama
BARIUM SULFATE—100 dms, Picker X-Ray Corp, London
BEEF EXTRACT—10 cs, Wessel Duval & Co, Porto Alegre
BEESWAX—30 bgs, Ciudad Trujillo
119 bgs, Alexandria
BERGAMOT OIL—20 hf cs, Grace National Bank, Messina
30 hf cs, National City Bank, Messina
BERRY WAX—9 bgs, E Gumpert Corp, Capetown
BONE—117 bgs, International Packers Ltd, Rio Grande
BUTTONLAC—100 bgs, Schwab Bros, Calcutta
100 bgs, Mac Lac Co, Calcutta
CAFFEINE—15 dms, Byron Chemical Co, Marseille
CALCIUM HYPOPHOSPHITE—2 cs, Rhodia, Inc, London
CARAWAY SEED—100 bgs, P H Petry, Rotterdam
100 bgs, Rotterdam
CARBON, ACTIVATED—142 dms, E I Dupont De Nemours & Co, Liverpool
CARDAMOM OIL—1 dm, Van Ameringen Haebler, Puerto Barrios
SEED—56 cs, Wm E Martin, Puerto Barrios
CARNAUBA WAX—101 bgs, Frank B Ross, Santos
111 bgs, J H Schroder, Fortaleza
CASEIN—300 bgs, Tupman Thurlow, Buenos Aires
200 bgs, East Asiatic Co, Buenos Aires
230 bgs, Louis Furth, Marseille
CASTOR BEANS—1,280 bgs, Baker Castor Oil Co, Manta
8,465 bgs, Spencer Kellogg, Salvador
16,936 bgs, Baker Castor Oil Co, Salvador
OIL—95 tons, Spencer Kellogg, Recife
100 tons, Brazilian Industrial Oils, Fortaleza
150 tons, Fortaleza
CHESTNUT EXTRACT—600 bgs, Barkey Importing Co, Genoa
LEAVES—16 bls, S B Penick & Co, Genoa
CHOLESTEROL—2 dms, Tupman Thurlow, London
CINNAMONBARK OIL—4 cs, Volgart Bros, Colombo
CINNAMON QUILLS—100 bls, Louis Furth, Colombo
50 bls, Mincing Trading Corp, Colombo
25 bls, Fritzsche Bros, Colombo
50 bls, Otto Gerdau, Colombo
50 bls, Colombo
CITRONELLA OIL—3 dms, I R Boody & Co, Chilung
10 dms, Lo Curto & Funk, Chilung
16 dms, L A Champon & Co, Chilung
45 dms, Garrigues Stewart & Davies, Chilung
15 dms, Felton Chemical Co, Chilung
95 dms, Internatio Rotterdam, Chilung
10 dms, Chilung
COALTAR DIES—3 dms, Ciba Co, Rotterdam
2 dms, Rotterdam
PITCH—3 dms, National Carbon Co, Genoa
COBALT POWDER—1 cs, C Hardy, Havre
COCOA RESIDUE—417 bgs, Woodward & Dickerson, Salvador
2,084 bgs, Hollander Trading Corp, Salvador
417 bgs, Woodward & Dickerson, Bahia
COCONUT OIL—234 tons, E F Drew & Co, Manila
920 tons, Manila
COD LIVER—520 dms, Silmo Chemical Corp, St Johns
OIL—99 bbls, Nopco Chemical Co, St Johns
100 dms, Scandinavian Oil Co, St Johns
100 dms, Reilly Whiteman Walton Co, St Johns
100 dms, Ottol Oil Co, St Johns
COPAIBA OIL—5 dms, Puerto Cabell
COPAL GUM—419 bgs, Archer Daniels Midland Co, Matadi
40 bgs, Matadi
360 bkts, O G Innes Corp, Macasser
COTTON LINTERS—110 bls, Antwerp
COUMARIN—20 dms, Havre
CRESYLIC ACID—30 dms, Republic Chemical Corp, Liverpool
CUTTLEFISH BONE—100 cs, Lisbon
DAMMAR GUM—140 bgs, S Winterbourne & Co, Singapore
140 bgs, Internatio Rotterdam, Singapore
DEXTRIN—1,150 bgs, Rotterdam
DILL SEED—81 bgs, Louis Furth, Bombay
EPSOM SALT—500 bgs, Chase Manhattan Bank, Bremen
ETHYL SALICYLATE—10 dms, Gallard Schlesinger, London
FISHLIVER OIL—100 dms, Silmo Chemical Corp, Yokohama
8 dms, Yokohama
FISHMEAL—1,965 bgs, Wessel Duval & Co, St Johns
FUEL OIL—165,000 bbls, Esso Standard Oil Co, Aruba
94,829 bbls, Esso Standard Oil Co, Cristobal
111,498 bbls, New England Petroleum Corp, Punta Cardon
137,093 bbls, Metropolitan Petroleum Corp, Puerto La Cruz
10,000 bbls, Asiatic Petroleum Corp, Curacao
GALL, OX—9 bbls, Wessel Duval & Co, Porto Alegre
GELATIN—100 bgs, T M Duche & Sons, Antwerp
93 dms, D H Burdett, London
GINGER ROOT—56 bgs, Kellys America Ltd, London
GLUE—160 bgs, Jung Forwarding Co, London
GRAPHITE—1,000 bgs, Asbury Graphite Mills, Colombo
250 bgs, C Pettinos, Colombo
GUAR GUM—702 bgs, Morningstar Nicol, Piraeus
GUARANA—10 cs, Meer Corp, Belem Para
GYPSUM—5,641 tons, U S Gypsum Co, Hantsport
10,276 tons, National Gypsum Co, Halifax
400 bgs, Whittaker Clark & Daniels, Liverpool
IODINE, CRUDE—40 kgs, Chase Manhattan Bank, Yokohama
160 kgs, North Atlantic Fertilizer & Chemical Co, Yokohama
IRON CARBONYL—54 dms, Antwerp
KARAYA GUM—183 bgs, Morningstar Nicol, Bombay
127 bgs, P A Dunkel, Bombay
183 bgs, Colony Import & Export Corp, Bombay
122 bgs, Thurston & Braidich, Bombay
97 bgs, Orbis Products Corp, Bombay
48 bgs, Tragacanth Importing Corp, Bombay
189 bgs, Stein Hall & Co, Bombay
LAUREL LEAVES—77 bls, Louis Furth, Izmir
160 bls, M J Golombeck, Piraeus
151 bls, Izmir
LEMONGRASS OIL—6 dms, George Lueders & Co, Cochin
6 dms, Verona Chemical Co, Cochin
11 dms, Trubek Lab, Cochin
LICORICE FLAKES—1,500 cs, Wm E Martin, Izmir
LIME OIL—2 dms, Port Au Prince
LITHARGE—3 dms, Electric Auto Lite Co, Buenos Aires
LIVERMEAL—250 bgs, Wessel Duval & Co, Porto Alegre
LIVER POWDER—21 dms, Tec Chemical Corp, Montevideo
LOCUST BEAN—200 bgs, W Mahneke, Casablanca
GUM—100 bgs, S B Penick & Co, Barcelona
400 bgs, Morningstar Nicol, Genoa
300 bgs, Guaranty Trust Co, Rotterdam
MACE—18 cs, A G Dunn, Rotterdam
7 cs, Rotterdam
MAGNESITE—300 bgs, Globe Shipping Co, Trieste
MAGNESIUM CARBONATE—480 bgs, Reheis Co, Liverpool
MANGANESE ORE—1,680 bgs, Union Carbide & Carbon Corp, London
MANGROVE BARK—1,420 bgs, River Plate Corp, Lourenco Marques
MONTAN WAX—87 bgs, Rotterdam
MYROBALANS—2,800 bgs, Barkey Importing Co, Bombay
1,600 bgs, Hammond & Carpenter, Bombay
728 bgs, Olson Sales Agency, Bombay
NAPHTHALENE—830 bgs, Koppers Co, Middlesbrough
2,841 bgs, Koppers Co, Liverpool
NAPHTHOL—1 dm, Hensel Bruckmann & Lorbacher, Rotterdam
NICKEL SULFATE—80 dms, Danwill Co, Rotterdam
NUTMEG—56 bgs, Rotterdam
OENANTHOL—50 dms, Millmaster Chemical Corp, Havre
OENOCYANINE—75 bbls, Genoa
OITICICA OIL—380 tons, Brazilian Industrial Oils, Fortaleza
OLIVE OIL—25 dms, Malaga
OPIUM—1 cs, E R Squibb & Sons, Istanbul
ORRIS ROOT—67 bgs, W Mahneke, Casablanca
PALM OIL—305 tons, Canada Packers Ltd, Matadi
219 tons, Procter & Gamble Co, Matadi
PALMKERNEL OIL—492 tons, Matadi
PALMAROSA OIL—2 pots, Kane Import Corp, London
PAPAIN—33 cs, R J Lepow, Dar es Salaam
19 cs, Ludwig Mueller, Dar es Salaam
7 cs, Chas L Huisking & Co, Tanga
150 hf chts, American Ferment Co, Colombo
73 cs, Empire Trust Co, Colombo
24 cs, Colombo
12 cs, Mombasa
PAPAYA LEAVES—100 bgs, Meer Corp, Colombo
PAPRIKA—654 bgs, Alicante
PATCHOULI OIL—7 dms, Antoine Chiris, Singapore
4 dms, Fleuroma Inc, Penang
PEATMOSS—2,500 bls, New Amsterdam Import Co, Aarhus
412 bls, Premier Peatmoss Corp, Copenhagen
PEPPER, BLACK—380 bgs, Internatio Rotterdam, Kuching
60 bgs, J Berlage, Kuching
60 bgs, C Czarinkow, Kuching
80 bgs, Joensson & Cross, Cochin
80 bgs, Ludwig Mueller, Cochin
40 bgs, Internatio Rotterdam, Alleppey
40 bgs, Ludwig Mueller, Alleppey
70 bgs, Internatio Rotterdam, Singapore
70 bgs, A C Israel, Singapore
160 bgs, Mincing Trading Corp, Cochin
140 bgs, Polak Trading Co, Singapore
280 bgs, Borneo Sumatra Trading Co, Singapore
WHITE—176 bgs, Internatio Rotterdam, Pangkal Pinang
120 bgs, Borneo Sumatra Trading Co, Pangkal Pinang
PEPSIN—4 cs, Frank Samuel & Co, Copenhagen
PETITGRAIN OIL—6 cs, Dodge & Olcott, Buenos Aires
PETROLEUM, CRUDE—69,219 bbls, Cities Service Oil Co, Las Piedras
59,520 bbls, Cities Service Oil Co, La Salina
227,038 bbls, Esso Standard Oil Co, Las Piedras
192,098 bbls, Phillips Petroleum Co, Puerto La Cruz
112,914 bbls, American Bitumuls & Asphalt Co, Las Piedras
188,623 bbls, California Oil Co, Sidon
214,294 bbls, Socony Mobil Oil Co, Puerto La Cruz
200,000 bbls, Esso Standard Oil Co, Puerto La Cruz
PIMENTO—47 bgs, Overseas Produce Corp, Vera Cruz
POLLACKLIVER OIL—30 dms, Consumers Import Co, Yokohama
110 dms, Interocean Chemical & Minerals Corp, Yokohama
150 dms, Bankers Trust Co, Yokohama
196 dms, Yokohama
POLYVINYL ALCOHOL—800 bgs, Marubeni Iida Co, Kobe
CHLORIDE—2,000 bgs, Miny Corp, Genoa
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333 bgs, Levy & Levis Co, Gdynia
200 bgs, Rotterdam
PYRETHRUM EXTRACT—30 dms, Mombasa
FLOWERS—126 bls, Olin Mathieson Chemical Co, Dar es Salaam
125 bls, Mombasa

QUEBRACHO EXTRACT—1,516 bgs, Barkey Importing Co, Buenos Aires
1,020 bgs, First National Boston, Buenos Aires
1,505 bgs, Hammond & Carpenter, Buenos Aires
RAUWOLFIA ROOT—3,958 bgs, Ciba Pharmaceutical Products, Matadi
2 bgs, East Asiatic Co, Matadi
255 bgs, Select Trading Co, Matadi
SERPENTINA ROOT—30 bgs, Meer Corp, Colombo
RHUBARB ROOT—46 bgs, S B Penick & Co, Bombay
RICE STARCH—200 bgs, Morningstar Nicol, Antwerp
234 bgs, American Key Products, Trieste
ROSE OIL—1 cs, Warner Lambert Pharmaceutical Co, Havre
ROSEWOOD OIL—14 dms, Hollander Trading Corp, Belem-Para
178 dms, Manaus
SACCHARINE—10 bbls, Leviant & Co, Rotterdam
SAFFRON—2 cs, Galvanoni & Nevy Bros, Genoa
1 cs, Genoa
SAGE LEAVES—70 bls, M J Golombeck, Piraeus
200 bls, Trieste
OIL—1 cs, Manufacturers Trust Co, Havre
SANDALWOOD—100 bgs, George Lueders & Co, Bombay
OIL—7 cs, George Uhe Co, Calcutta
9 cs, Lo Curto & Funk, Cochin
SEEDLAC—150 bgs, Colony Import & Export Corp, Calcutta
200 bgs, C H Timm, Calcutta
1,150 bgs, Gillespie Roger Pyatt, Calcutta
200 bgs, Capitol Shellac Corp, Calcutta
900 bgs, Mac Lac Co, Calcutta
600 bgs, Wm Zinser & Co, Calcutta
75 bgs, A Issacs & Sons, Calcutta
SESAME SEED—205 bgs, R J Spitz, Alexandria
HULLED—300 bgs, Guaranty Trust Co, Alexandria
150 bgs, R J Spitz, Alexandria
224 bgs, C M Van Sillevoldt, Alexandria
SHARKLIVER OIL—25 dms, Arista Oil Products Co, Yokohama
SODIUM ALGINATE—1 bbl, Croda Inc, Oslo
2 ctns, Croda Inc, Oslo
CYANIDE—675 dms, Chemical Manufacturing Co, Middlesbrough
180 dms, American Cyanamid Co, Middlesbrough
50 dms, C Hardy, Havre
p-AMINOSALICYLATE—50 dms, Havre
SILICOFLUORIDE—250 bgs, Express Forwarding Co, Kobe
STEATITE—840 bgs, M Kirchberger & Co, Calcutta
SULFAQUANIDINE—20 dms, Havre
TALC—5,630 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—3,000 bgs, Internatio Rotterdam, Kohsichang
TOLU BALSAM—50 cs, Barranquilla
TRAGACANTH GUM—62 cs, Meer Corp, Beirut
TRICHLOROETHYLENE—150 dms, Miny Corp, Venice
UREA—280 bgs, Nvlos Trading Co, Genoa
SYNTHETIC—4,000 bgs, Chemical Mfg Co, Middlesbrough
4,000 bgs, Chemical Mfg Co, Liverpool
VALONIA—750 bgs, M E Bensignor, Izmir
BEARDS—680 bgs, M E Bensignor, Canakkale
VANILLA BEANS—26 cs, National City Bank, Djibouti
100 cs, Chase Manhattan Bank, Djibouti
47 cs, Phila National Bank, Djibouti
403 cs, Norda Essential Oil & Chemical Co, Vera Cruz
49 cs, Djibouti
VETIVER OIL—1 dm, Port Au Prince
VITAMIN B¹²—2 cs, Marklin Chemical Corp, Kobe
30 dms, D F Young, Yokohama
15 cs, Byco Ltd, Yokohama
14 dms, Byron Chemical Co, Kobe
VITAMIN C—25 cs, Byron Chemical Co, Kobe
WATTLE EXTRACT—661 bgs, Hammond & Carpenter, Durban
WHITING—600 bgs, Hammill & Gillespie, Aarhus
4,200 bgs, Antwerp
WOOL GREASE—158 dms, Chemical Bank, Genoa
YLANG YLANG OIL—2 cs, French American Banking Corp, Djibouti
ZINC CYANIDE—89 dms, Chemical Mfg Co, Middlesbrough

Boston

BONE—600 bgs, Eastman Gelatine Corp, Rio de Janeiro

Philadelphia

ANTIMONY OXIDE—1,600 bgs, Middlesbrough
40 cks, Middlesbrough
200 bgs, Antwerp
120 cs, Havre
CRESYLIC ACID—100 dms, Glasgow
GRAPHITE—400 bgs, Colombo
GYPSUM—4,007 tons, U S Gypsum Co, Hantsport
HORNMEAL—901 bgs, Wilson & Co, Santos
IRON OXIDE—3,532 bgs, Malaga
NAPHTHALENE—2,268 bgs, Middlesbrough
1,038 bgs, Rotterdam
PARIS WHITE—1,400 bgs, Hull
PEATMOSS—2,500 bls, Bremen
600 bls, Hamburg
PETROLEUM, CRUDE—126,253 bbls, Atlantic Refining Co, Banias
613,115 bbls, Gulf Oil Corp, Puetro La Cruz
543,969 bbls, Gulf Oil Corp, Mena Al Ahmadi
189,089 bbls, Socony Mobil Oil Co, Mena Al Ahmadi
123,060 bbls, Socony Mobil Oil Co, Covenas
263,677 bbls, The Texas Co, Puerto La Cruz
143,231 bbls, The Texas Co, Las Piedras
QUEBRACHO EXTRACT—4,367 bgs, Buenos Aires
SHELLAC—75 bgs, Calcutta
SODIUM CYANIDE—107 dms, Middlesbrough
UREA—4,000 bgs, Middlesbrough
VANILLA BEANS—25 cs, Vera Cruz
WHITING—6,600 bgs, Antwerp

San Francisco

ALUMINUM SULFATE—200 bgs, G F Smith, Antwerp
ANISE SEED—50 bgs, Bank of California, Marseille
CARAWAY SEED—50 bgs, McClintock Stern Co, Rotterdam
100 bgs, B C Ireland, Rotterdam
CARDAMOM—4 cs, London
CASEIN—500 bgs, J R Spellacy, Sydney
CASSIA—749 pkgs, Rotterdam
CLAY, CHINA—450 tons, Balfour Guthrie, Fowey
COPRA—1,300 tons, Cargill Inc, Cebu
500 tons, Pacific Vegetable Oil Corp, Legaspi
COTTON LINTERS—80 bls, Grace & Co, San Jose
CUMIN SEED—182 bgs, Rotterdam
DEXTRIN—220 bgs, Arabol Manufacturing Co, Rotterdam
DILL SEED—80 bgs, Hismoco American Co, Suez
LAUREL LEAVES—100 bls, H M Newhall & Co, Rotterdam
LIVERMEAL—820 bgs, Wm H Muller, Hamburg
SODIUM GLUTAMATE, MONO—20 cs Lee's Agency, Kobe
OLIVE OIL—300 dms, A Giurlani & Bros, Leghorn
PEATMOSS—1,250 bls, Lastreto Phillips, Bremen
500 bls, Trans Sphere Trading Corp, Bremen
800 bls, Lastreto Phillips, Rotterdam
PETROLEUM, CRUDE—51,896 tons, Standard Oil Co, Sungai Pakning
ROSEMARY LEAVES—200 bls, H M Newhall & Co, Rotterdam
SALICYLIC ACID—35 dms, U S Factors Ltd, Rotterdam
10 dms, Antwerp
SODIUM CYANIDE—75 dms, C M C Chemicals Inc, London
TRICHLOROETHYLENE—50 dms, N Y Hanseatic Corp, Rotterdam
UREA, SYNTHETIC—5,000 bgs, C M C Chemicals Inc, London
WHITING—2,832 bgs, Pluess Staufer, Antwerp
ZINC CYANIDE—15 dms, C M C Chemicals Inc, London

Petrochemical Growth

—*Continued from page 7*

chemical industry in the United States," Dr. Davidson said, in introducing his "Anecdotal Reminiscences."

"The growth was sudden—almost explosive. Prior to the 1920's, we had in the United States an organic chemical industry but it was small. The total sale of chemicals that we would now include in that category amounted to only 14,000,000 pounds as against 3,200,000,000,000 pounds at the present time. Furthermore, many of the chemicals, such as, acetone, acetic acid and methanol were made by processes that did not even faintly resemble the present processes.

"I need hardly stop to say that at that time these three products were produced by the destructive distillation of wood, the by-product and sometimes the main product being charcoal. You might almost say that any similarity to names, places or compounds, living or dead, was purely coincidental.

"On the other hand, this situation is not so strange as it at first seems because the raw materials from which our present day petrochemicals are produced were not then available. I am referring primarily to ethylene and proylene. It seems to me to be a fact which is totally documented in the present instance that an industry will develop with a speed that is pretty much proportional to the availability, suitability and excellence of the tools with which it has to work. The production of automobiles as we know it today would be impossible if it still had to rely upon the tools, jigs, fixtures and methods of the 1920's. The same thing," Dr. Davidson said, "is obviously true of the chemical industry."

API to Hear

—*Continued from page 7*

of economics and industrial relations at California Institute of Technology, and J. Hugh Jackson, dean of the Graduate School of Business at Stanford University.

Among the leaders of business and finance will be:—E. J. Thomas, president of Goodyear Tire & Rubber Company; Lyon F Terry, of Chase Manhattan Bank, and N. B. Guyol, a staff statistician for the United Nations.

A new feature of this year's meeting will be a medical and health session. This will be under the sponsorship of the institute's medical advisory committee. Topics to be discussed will include industrial hygiene in the petroleum industry, the noise problem, and the aging, ailing truck driver.

Another feature of interest to petroleum marketers will be a session on fuel oil. This will take place during the first marketing division group meeting. Three experts will discuss one-fuel chimneys, electric heating competition and distillate market opportunities.

Isosebacic Acid Plant

—*Continued from page 3*

been in new pilot plant facilities at the Cincinnati research laboratory.

The Cincinnati pilot plant will continue to operate to supply samples and to develop further process refinements until the Tuscola plant comes on stream. Over 400 research laboratories already have received samples of "USI Isosebacic" acid for evaluation. The product shows considerable promise as a raw material for vinyl resin plasticiers with excellent low-volatility, non-migration, and low-temperature characteristics, the producer said.

The new chemical is produced by a novel process for which the principal raw materials are butadiene and sodium, of which USI is an important producer. Tuscola was chosen as the location for the new plant because of the availability of raw materials at this site—hydrocarbons from National Petro-Chemicals Corporation as well as sulfuric acid and other raw materials from the adjacent USI installation.

Potash Shows Gain

—*Continued from page 5*

percent in K_2O over the comparable period in 1954. Agricultural deliveries in the United States, Canada, Cuba, Puerto Rico, and Hawaii amounted to 542,769 tons of salts, equivalent to 320,008 tons K_2O, a decrease of 7 percent in salts and 6 percent in K_2O.

These deliveries were comprised of 493,058 tons of muriate of potash, 888 tons of manure salts, and 48,823 tons of sulphate of potash and potash-magnesia. The chemical industry took 44,096 tons of muriate of potash and sulphate of potash, containing an equivalent of 27,384 tons K_2O, an increase of 31 percent. Exports outside of North America amounted to 66,797 tons of salts containing 40,427 tons K_2O, an increase of 1,025 percent in salts and 1,022 percent in K_2O.

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Essential Oils, Aromatics, Flavorings

• Nutmeg oil prices soared last week as full intelligence of the damaged crop was made public. Damage that may limit crops for the next five or ten years was reported by producers from the West Indies. The crop destruction was attributed to two factors: damage from the hurricane that passed through the area early in the fall, and lava dust from Island volcanoes that recently showed some activity.

West Indian quality nutmeg oil climbed a full $1 per pound, its spot selling price going at $4.00. East Indian climbed 90 cents and is also going for $4.00

In spite of the intense activity in the nutmeg market, there was little activity for the other essential oils. On the whole, the market appeared to show some firmness, though this was not borne out by the price variations. Two commodities, cedarwood oil and cenopodium oil declined slightly. Cedarwood declined 3 cents to a listing of 62 cents; chenopodium fell 15 cents to a range of $3.60-$5.00 per pound.

The seeds and spices, following a trend that has been apparent for the past weeks, showed little activity also. Aside from pepper, which showed some easing in two qualities, there appeared to be good strength in the market. Nutmeg and mace, both continued their swift paced advancement of price. Original suggestions by dealers that prices might decline for these two commodities once the full extent of damage were known, have not been borne out, primarily because the damage was much more extensive than had been originally anticipated. Siauw siftings advanced 40 cents, East Indian nutmeg moved up 5 cents and West Indian quality advanced 11 cents. Some activity was also seen in the fenugreek and fenugreek and ginger markets.

Essential Oils

Cedarwood — This oil showed a new easiness in its market last week, it was reported, with a 3c. decline to a range of 62c.-$1 per pound. It had previously stood steady for a number of weeks. Supply is reported to be good.

Chenopodium — This oil declined 15c. last week, to a range of $3.60-$5 per pound, it was reported. Earlier reports of full stocks on the spot market have been confirmed. The oil had previously stood unmoved in price for several weeks.

Cinnamon Bark—This commodity appeared to be firming up slightly last week, it was reported. The outside price climbed from $65 to $70 per pound. The inside price continued at $25.

Geranium — The market for bourbon quality geranium oil stiffened slightly last week, dealers noted, with a small hike in the outside price listing. The quotation moved up 50c. to $14.50 per lb. The inside price of $12.25 remained unchanged. Algerian quality oil also stood at its old listing of $11.50-$14.50 per lb.

Ginger — Distilled ginger oil showed some new strength in the market last week, with a $1 advance in its outside listing taking it up to $21. The inside price of $15.50 per pound remained unchanged.

Lemon—A firm tone prevailed in California quality last week, it was reported, and major suppliers point out that prices are likely to be maintained at current levels over the remainder of the year. Seasonal demand during the approaching holiday period should add to the present strength being shown. The pressing of newcrop lemons in Italy is believed to have started but details concerning new oil production are not yet available. Present listing for this oil is a $4.50-$5.50 range for California quality, $4.85-$9.80 for Messina, and $32-$85 per pound for terpeneless quality.

Lime—Prices for this oil remain at the lowest level in some time despite earlier attempts on the part of sellers to otbain higher levels. Demands are steady but supplies continue ample to meet over all requirements. Mexican distilled was selling for $3-$4.75; West Indian quality was selling for $3-$4.75, and West Indian expressed was listed at $7-$8 per pound.

Mace—Dealers for the most part have withdrawn this oil from the market in order to judge the direction the present fluctuating situation will take it. Heavy damage to the crop in the West Indies caused growers to advance their prices swiftly at the source. The spot market, as a result, moved forward swiftly also. Last week most dealers conceded that they would wait out the period of vaccilation. What mace oil was to be found was being quoted at about $4 per pound.

Nutmeg—Oil prices for both qualities soared last week as a fuller knowledge of the extent of damage done became available, it was reported. West Indian nutmeg oil climbed a full $1 per pound to a listing of $4 for an inside price. East Indian oil advanced 90c. to an inside listing of $4 also. Outside price for both qualities is about $4.50 per pound. Reports from the West Indies place the damage at such a high level as to have set back the crop five to ten years. Causes were attributed to both the hurricanes that crushed the islands early in the fall, and lava dust that has fallen from semi-activated volcanoes.

Price Trends

Advanced

Fenugreek seed, Indian, 1½c. per lb.
Moroccan, 1½c. per lb.
Ginger, Jamaica #2, 4c. per lb.
Jamaica #3, 4c. per lb.
Mace, Siauw, siftings, 40c. per lb.
Nutmeg, East Indian, 5c. per lb.
West Indian, 11c. per lb.
Oil, nutmeg, East Indian, 90c. per lb.
West Indian, $1 per lb.

Reduced

Caraway, Dutch, ½c. per lb.
Oil, cedarwood, 3c. per lb.
Chenopodium, 15c. per lb.
Pepper, black, Malabar, 3c. per lb.
White, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 3, 1954
134.74	134.63	134.58	138.54

(*For Current Prices see Page 9*)

Aromatic Chemicals

Heliotropin—A slight easing was noted in the heliotropin crystal market last week, it was noted. A 5c. price decline brought the listed range down to $4.05-$4.50 per pound. The market has shown signs of pending decline for several weeks.

Miscellaneous

Cassias—Most grades of this commodity appeared to be waiting for a broader interest last week, as listings continued unchanged. Shipment prices continued to rule higher than spot levels and offerings are not particularly frequent. The market has failed to reflect the situation to any large degree for the past thirty days to sixty days. The chances are that stocks held throughout the country were large enough to handle the trade's current requirements, but difficulty will be found in replacing the quantity consumed.

Cinnamon—Both qualities showed very firm markets last week, it was reported. In spite of the firmness, quotations remained unmoved with Ceylon quality, afloat, standing at 68c. per pound, and "0000" quality, also afloat, remaining at 86c. per pound.

Fenugreek Seed — This commodity showed new firmness in both Indian and Moroccan qualities last week, it was reported. Both qualities advanced 1½c. per pound to 10c. listings. Sources reported that new higher offerings from India were responsible for the price shift.

Ginger—Both Jamaican qualities firmed somewhat last week, it was reported. Jamaica number 2 advanced 4c. to a 59c. listing and number 3 moved up 3c. to a 58c. listing.

Scarcity on the spot market is considered the cause of the advance, according to one producer. The earliest new crop Ginger will be a December-January shipment of Cochin quality. It is aslo said, though not with any finality, that some Nigerian quality should also be arriving about that time. Jamaican quotations on newcrop are very high.

Mace—Siauw siftings quality prices skyrocketed again last week, it was reported. A 40c. advancement brought the range up to $2.25-$2.65 per pound. Sources said that the price shift was brought about by swiftly advancing prices at the point of origin. West Indian quality remain unavailable. The point of origin price advances were caused by confirmed reports of the extensive damage caused by the early autumn hurricanes.

Nutmeg—This commodity continued to firm at a swift pace last week, it was reported. Both East and West Indian qualities advanced again, the former moving up 5c. to a 60c.-62c. range, and the latter advancing 11c. to a 60c. listing. The

For Late Market Developments, See Page 4

swift rising of this market is resultant of the fuller knowledge that has been made public of the terrific toll taken by the hurricanes on the West Indian nutmeg plantations.

Pepper—Black Malabar and white pepper eased up somewhat last week, it was reported. Malabar came down 3c. to a 39c. listing and white declined 1c. per pound.

The decline was gradual and was largely accepted as resultant of small demand. The pressure created by lower prices on spot Sarawak undoubtedly had something to do with the weakness in Malabar and Lampong prices.

There appeared a willingness to sell newcrop positions. There wasn't a great deal of competition from Indonesia or Singapore on Lampong. This being the case, it would not take a great deal of improvement in general demand to give India a steady market in which to sell its newcrop pepper.

Pepper exports from India declined sharply in value during 1954-55, despite an increase in quantity, it was reported. Shipments rose from 255,220 cwt. in 1953-54 to 273,782 cwt. in 1954-55, but their value fell off better than 50 percent. Bigger sales to the United States were considered mainly responsible for the larger shipments, it was noted. Exports to the United Kingdom and France fell sharply; the USSR also bought less. Shipments to Egypt and Italy improved slightly. Increased pepper production in Indonesia and Sarawak was responsible for the sharp drop in prices and the decline in India's world market.

Vanilla Bean—Exports to the United States have climbed steadily since 1948, according to a report from Jamaica. With the exception of the outstanding year, 1950, at which time we imported 1,032 long tons of vanilla bean, import figures have risen on the average of 50 long tons a year, commencing with 450 tons in 1939, and rising to 750 long tons in 1953.

Paper Chemistry Institute Appoints Two to Its Staff

Dr. A. Neil McLeod has joined the staff of The Institute of Paper Chemistry as research associate in economics, and C. L. Brown has been appointed bibliographer. Dr. McLeod will engage in teaching and research in the field of economics and marketing as related to the paper industry. He was with Food Fair Stores, Inc. before joining the institute.

Mr. Brown previously had been an abstractor and literary searcher with the National Research Council.

Magnus Will Be Honored

Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., New York, will be the guest of honor at the national Newcomen dinner, to be held November 17 at the Pierre hotel, New York. He will be honored on the occasion of the sixtieth anniversary of the company.

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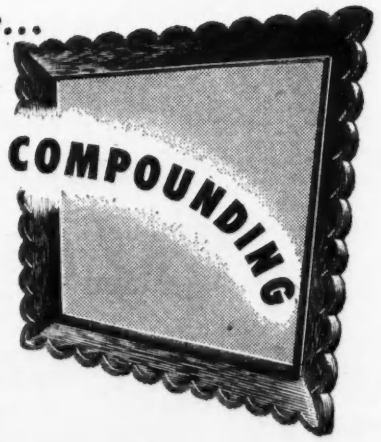

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ZIRCO cuts drying time

You've seen drying tests before. The four panels in the unretouched photo tell the ZIRCO story better than mere words. The panel on the left was coated with a conventional outside house paint containing ZIRCO—the other three with paint containing conventional drier systems. The ZIRCO panel dried in 12 hours. Compare the ZIRCO results with the others, then try ZIRCO yourself.

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National Paint, Varnish and Lacquer Association

67th Annual Meeting, Washington, D.C., October 31—November 2

The paint industry must "think big" in order to secure a rightful share of the consumer market, Joseph F. Battley, president of the National Paint, Varnish and Lacquer Association told NPVLA last week at its sixty-seventh annual meeting in Washington, D. C. While sales for the paint industry will reach an all-time high in 1955, Mr. Battley declared that the industry must, in this era

Joseph F. Battley

of new technical developments, think in terms of completely new products.

"Our industry's best thinkers believe that, for us, the handwriting on the wall involves bold concepts of new compounds, new synthetics, new elements from which we will build the coatings for the future new materials will be the guarantee for our industry's progress," the NPVLA president continued.

"I suggest that the best insurance for our industry against sudden dislocation lies in thinking adventurously—thinking big—for developing sources—now undiscovered—materials—now unknown — for your future coatings."

He pointed out that industries are worried about nuclear developments "not because they may be utilized in war, but because the industries may be late in the race to use nuclear energy. We, too, are in this race," he asserted, "because new technics lead to unknown requirements that are bound to our technical growth with a 'Gordian Knot'."

Industry Must 'Think Big'

Mr. Battley felt that the paint industry faces "such good business, such a zoom in the economy, such tall statistical ceilings, that the only problem, is simply to keep up with the surge, to think big because the entire world of industry is thinking big." It is, he added, "a nice sort of problem to have."

The Eisenhower administration has kept its promise of giving business—workers, investor and management—"a greater chance to earn more money for themselves," asserted Secretary of Commerce Sinclair Weeks.

Favorable Business Environment

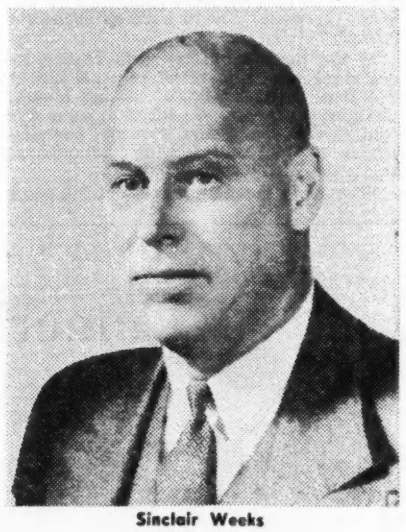
"Today," Mr. Weeks declared, "private enterprise operates in the most favorable environment in which it has ever operated. The record shows that the American people can and are earning 'more money for themselves'—more than any people on earth—more than at any other time in history. And they are earning stabilized not inflated dollars."

The Commerce secretary said that the NPVLA staff is working hand-in-hand with the Business and Defense Services Administration to get "the government out of business which can be better done by private enterprise."

He noted that the federal government "is now almost out of the paint business," that the federal barge line has been sold and that the government's synthetic rubber plants have been disposed of "at a good profit."

Citing some of the administration's economic accomplishments, Mr. Weeks stated, "President Eisenhower's administration has succeeded in stabilizing the dollar. Deficit financing is almost out of the picture.

"There is a good chance," he went on, "of a balanced budget by June 30, 1956.



Sinclair Weeks

After the cost of living index had climbed 47 percent from August, 1945, to January, 1953, the period from January, 1953, to September, 1955, has shown a rise of only approximately ½ of 1 percent.

Prosperity Called Greatest in History

"Today," he indicated, "we have a peaceful prosperity greater than at any time in history. Since 1952 employment has risen from 61.3 to 64.7 million Our gross national product has increased

Text of President Battley's Address

I am honored to welcome you to Washington—honored because I know you individually and honored because, assembled in a group, you represent one of the top ten among American industries,

As members of the National Paint, Varnish and Lacquer Association assembled today, you represent sixty-eight years of cooperative and creative progress.

Assembled here, you are characteristically American, a convention of men who set the pace in one field for the entire world. Assembled, you represent something financially imposing, the seventh ranking industry in a country that has over sixty categories of industry. This year our sales will top one billion and a half.

Assembled, you typify the spirit of free enterprise and ethical competitive efforts that made such progress possible—a spirit that will remain with us to the end of time.

More important still—assembled here you represent the foundation from which springs the protection and beautification of everything that means the welfare of the individual, the economy of the country and the security of the nation.

Urges Industry to Widen Horizons

In anticipating this meeting today, I debated for some time as to which of our problems should be assigned highest priority, and it suddenly struck me that our industry has one major shortcoming . . . that is . . . that the members of the industry are not quite aware how big it is, not quite aware of its high position and prestige in the nation. If I might make the soft impeachment, I will say that we should think big.

I have a few points to make today, and I find that the conclusion, after each one, is that if we think them through and think as big as we are, these problems will be solved easily.

This industry's convention can be a

—Continued on page 68

Your "Q" to Quality SHELLAC

"4-Most" for Quality

1. Bone dry bleached white shellac.
2. No. 65 extra white refined bone dry bleached shellac.
3. 8 lb. extra light pure French varnish
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$46.8 billion and personal income $23.9 billion during the last three years.

"A recent check with the Business Advisory Council," he added, "indicates that the first six months of 1956 should continue this same trend. In general this is true for both sales and capital expenditures."

Why These Are Good Times

The country is enjoying "unprecedented prosperity," the secretary felt, because the administration "has unquenchable confidence in the long-haul power of free enterprise."

"We have confidence in our free system," he concluded. "The American people have confidence in that system and confidence in President Eisenhower. And from this widespread confidence stems the willingness to use that system to expand prosperity and to develop economic growth."

If the paint industry is to realize its full market for the sale of paint, it should not limit its thinking to existing homes, the trade sales manufacturers' forum was told by Cyrus B. Sweet, assistant commissioner of Federal Housing Administration's title I division.

"For every home improvement the paint industry promotes, such as carports, new utility and recreation rooms, wallpapering, porches, siding, garages, etc.," Mr. Sweet told the paint makers, "you will sell another gallon of paint which would have otherwise remained on the shelf.

"There is hardly a home job you can think of where paint is not the finishing product. But the dealer has to sell more than the product; he has to satisfy the customers' buying habits.

"It is up to the manufacturer to educate the dealers in the technics of consumer buying. The customer may have the necessary urge and desire to paint but he has to be shown the way to pay; the answer to this is consumer financing and FHA title I stands ready to help."

Problems of Paint Dealers

Paint dealers face five key problems in their merchandising operations, it was reported by Chester A. Watkins, president of the Retail Paint and Wallpaper Distributors of America. First, he said, there is the problem of stock or inventory control. Secondly, he cited the problem of record keeping.

In the third place, Mr. Watkins continued, "dealers need a clear-cut guide to setting up advertising and promotion budgets." Fourthly, he pointed to sales training, and, finally, he said paint dealers face the problem of how to capitalize on the nation's "vast consumer credit market."

Wholesale-Distributors Session

Noting that the US population is increasing at the rate of 2,830,000 persons a year and that 51 percent of American housing is more than thirty-five years old, H. B. Weatherford of Harwood Brothers, Inc., Richmond, Va., told the wholesale-distributors division that this vast market for paint and varnish poses a number of questions,

"Have we used every sales tool at our command?" he asked. "Have we properly promoted color? Have we given enough thought and effort to sales training? Have we aided our dealers in setting up time payment plans? Have we fully explored the potential paint markets in our territory?"

Emulsion vs. Solvent Roof Coatings

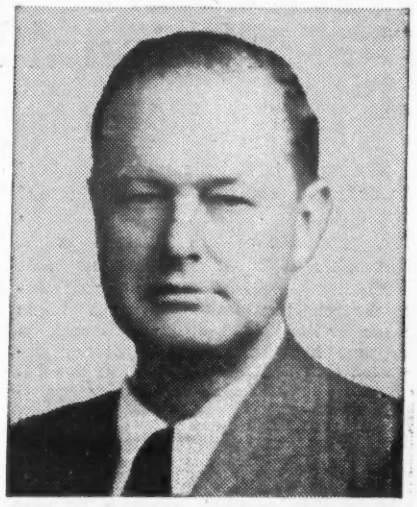
The roof coating manufacturers forum was given a seven-point comparison between emulsion and solvent thinned asphalt roof coatings by Ronald Brown of Tremco Manufacturing Company, Cleveland, Ohio. Mr. Brown itemized his key points as follows:—

"1. Asphalt emulsions are completely static, will not run, sag, or soften other coatings while the solvent thin coatings may run on very steep surfaces, may sag in very hot weather.

"2. Emulsions have a strong adhesive bond even on vertical surfaces provided the surface is not powdery or scaling; while the solvent type are much more likely to bond well to a duty surface.

3. Emulsions are easy to supply, no disagreeable odor or fumes while cutbacks do have an odor and are somewhat inflammable. Both may be applied by brush or spray or squegee, although the emulsion should be brushed even after spraying to seal pin holes. Ordinary brushing may leave thin places caused by brush

—*Continued on page 80*



Frank P. Connolly, president of John W. Masury & Son, Inc., Baltimore, Md., was presented with one of the 1955 George B. Heckel paint industry awards at last week's NPVLA convention. The second Heckel award for 1955 was presented a month ago to Edgar W. Fasig, general superintendent of Lowe Brothers Company, Dayton, Ohio.

Text of Battley's Address

—Continued from page 67

number of things, but all our annual conclaves have one common purpose.

All members of the industry know that, with things moving as fast as they do, there is more we have to do in a central meeting.

Despite the function of our trade magazines, our hundreds of mailings and publications, despite our frequent visits, it is wise to meet in one place and take stock of our progress during the past and it is time to take compass bearings and see if we will move forward. It is a good time to trade hunches, find out if there are sleepers menacing the industry, any dangers from what may only be a small cloud on the horizon.

Calls Attention to 'Sleepers'

And in this convention, gentlemen . . . the sixty-eighth in our history (we had two forty ninth "forty-ninth conventions"—the extra one in 1937). I must warn that while things are good, the situation is not all sweetness and light, I must warn that we should be on the alert for at least four "sleepers."

It is not the function of national conventions to settle details of problems, but it is prudent to appraise their seriousness. If we look at the grand total of the yearly production of our industry, we see a strange contradiction. We are doing the biggest business in our history . . . and falling behind. Look at the growth chart of our combined operations. You will see a total that tops a curve that has never flattened out in thirty years. The climb has been upward.

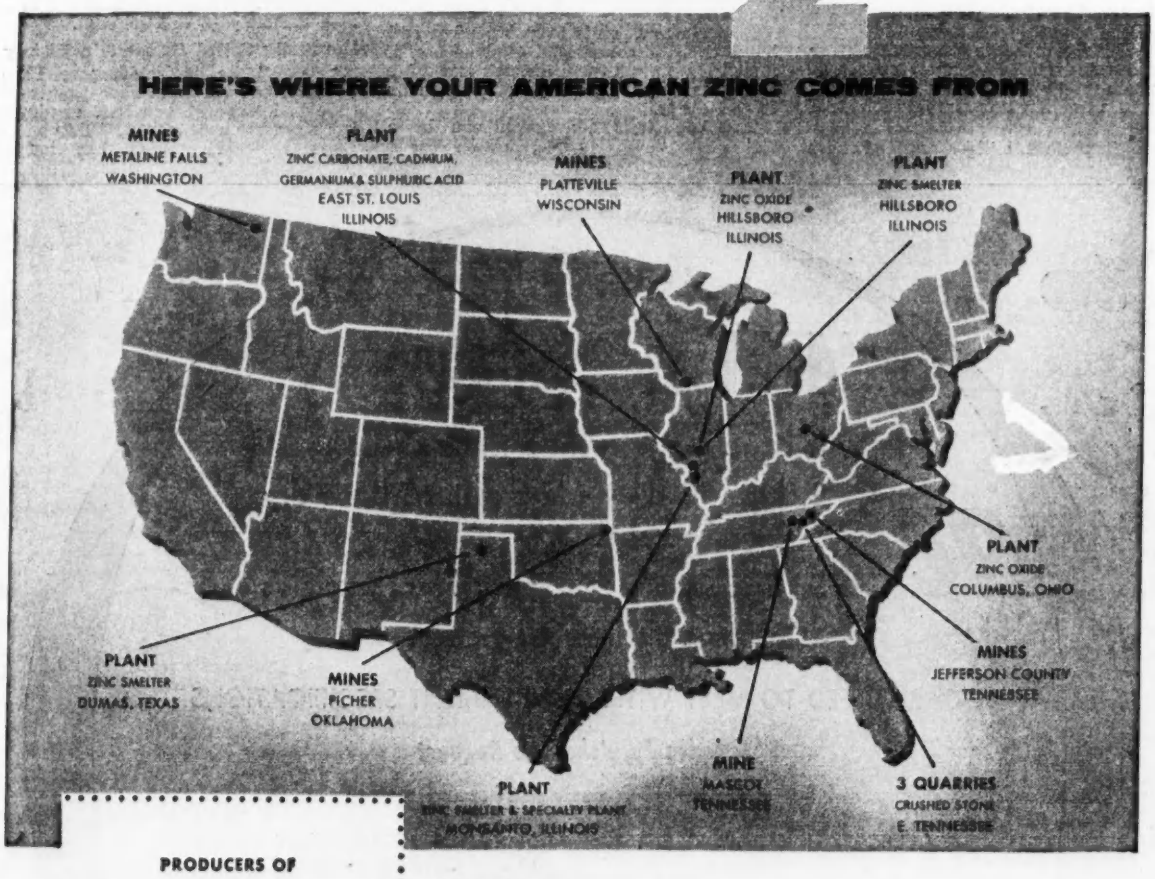
And yet, while practically all US producers have followed the same upward trend . . . the industries that produce housing, breakfast foods, steel . . . they have done so with a rate of climb greater than ours. Where they increased 180 percent over a base year, we increased 105 percent, so that our huge 1955 total looks less impressive.

This is another way of saying that we are not getting our share of the consumer dollar. This is the first problem to start thinking big about.

Economists seek far and wide for the causes. I'm not sure we understand all of the causes, but we do know one. That is, we have missed out in one important field of merchandising. We lag on installment credit sales of paint and painting.

We have addressed the problem, of course, and have several programs underway. Two of our committees are working out a joint industry approach. One

American Zinc and its products from A to Z



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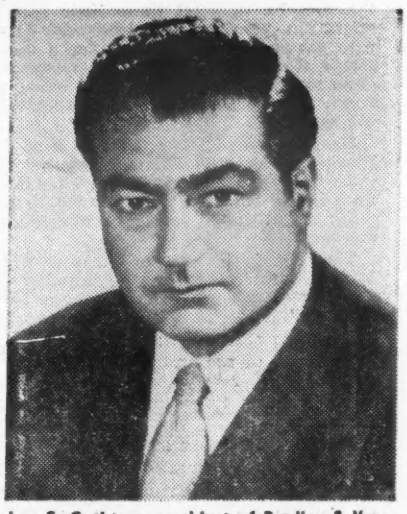


Leo S. Guthman, president of Bradley & Vrooman Company, Chicago, was re-elected to a one-year term as vice-president of NPVLA.

subcommittee is preparing a plan to help credit selling by our dealers and contractors.

We have not been entirely remiss, but . . . in the name of candor . . . we must admit that 1955 is a bit late to be embracing consumer credit devices—the machinery for credit sales has been old stuff to the automobile industry, the housing industry, and to many others for twenty years. For some reason we have assumed that our industry is outside the "Buy Now . . . Pay Monthly" sphere. Perhaps this stems from the fact that our business has been so good that we haven't felt the pinch. But any laxity now could turn out to be the first one of our "sleepers."

The housing people have long known that a buyer will often settle for the inferior competitive house if his payments involve less of a headache than those required for the better house.

The vast department store industry knows that quality standards are not the whole answer to competition, that matching the credit offer of the competitor is, at times, more important. They have developed financing schemes for many other industries to a fine art . . . the "Budget Plan," the "90-Day Charge," the "Seasonal Plan," and the "Layaway" plan.

Currently we face no crisis but big changes can come fast. As an example, the high pressure credit sales of the so-called "Never-paint-again-permanent-house-coating" was a "sleeper" that we had not anticipated. If this very questionable product had been all that was claimed by its promoters and had been made by a reliable competing industry with well-oiled, nationwide credit machinery, I suggest that we would have taken a much faster step toward installment sales to protect our markets.

Reports on Atomic Convention

I mentioned the "sleeper," a useful word that can also cover any sudden research development which seems to grow in the dark to emerge full blown. The nature of this type of "sleeper" was graphically illustrated to me when I visited another convention held here last month in the Sheraton-Park hotel. For last month this city saw one of the oddest conventions ever held.

Here were several hundred men discussing in detail and with displays a subject whose very mention, several years ago, would have meant a visit from the FBI and some investigating as to why they were interested.

It was a showing of devices and plans for peace-time use of atomic energy where men analyzed drawings known only to the AEC up to last year.

Many nuclear developments are still forbidden subjects, of course, and one can still make the penitentiary team for passing certain information to the wrong side. But the atomic security field has opened up to such an extent that we had a compare-notes meeting at Geneva and another in Washington.

I talked to one visitor to the atomic convention who was on his way home. He was optimistic. He was an executive of a small chemical company using a highly complex process. He was not afraid of atomic war—but how big he had to think in the atomic age. "We're sitting back there in Chicago," he said, "reading our morning papers; how the atomic submarine stood its test run, how the atomic plane is twenty years away—the atomic so-and-so twenty-five years away."

"Believe me," he said, "I learned enough during my visit to the atomic trade show to know that we won't have any fifteen year lag in peacetime use of atomic power. Atomic power plants are here, now! And my company is vulnerable—we don't have the technical staff to meet this challenge."

Jet Progress in Aviation Cited

I know some of you know the details of the fantastic aviation race now on, but it is a good example of another "sleeper" which jolted aviation all over the world—and we are involved as we furnish the finishes and other coatings.

During the war, the United States and England were concerned with the defeat of Germany and each developed and built fighter and bomber planes to that end. However, it was inevitable that the British and US aircraft industries reach an unwritten agreement, we to make the heavy bombers, the British, with less frame capacity, to confine themselves to smaller fighters and pursuits—a sort of military cartel dividing up the job.

However, at war's end, the Americans were tooled up for an immediate switch from military long-range bombers to the big commercial transports. Naturally, the US wound up cornering the market for practically all commercial craft. The British couldn't compete with all that wartime research and large plane production experience and they didn't even try. They thought big—they went into jets. They made no bid for the gasoline-engine market.

As the world knows, the British came up with the Comet, and had what was considered a five-year lead on US jet research. They were beginning to count the profits from cornering all jet transport markets—then—the Comet had a little bad luck, now overcome, but in the meantime two American companies closed in so fast that, last month, one US airline placed a $280,000,000 order for US-built jet transports.

Problem of Future Airstrips

That was just the beginning. Within twenty-four hours, three other US lines announced they would re-equip with US jets and came in with $100,000,000 orders. As a result, mayors in a hundred cities are wondering what to do to their airstrips to accommodate these big US jets in 1957—what will they do in 1967—the answer requires someone to think big.

Even now truck and rail people are scanning the skies, wondering what those five hour coast-to-coast jet schedules will do to their business and what other dislocations lie ahead for them with the coming jet "Flying Box Cars."

Our industry's best thinkers believe that, for us, the handwriting on the wall involves bold concepts of new compounds, new synthetics, new elements from which we will build the coatings for the future. New materials will be the guarantee for our industry's progress.

I suggest that the best insurance for our own industry against sudden dislocation lies in thinking adventurously—thinking big—for developing sources—now undiscovered—materials — now unknown — for your future coatings.

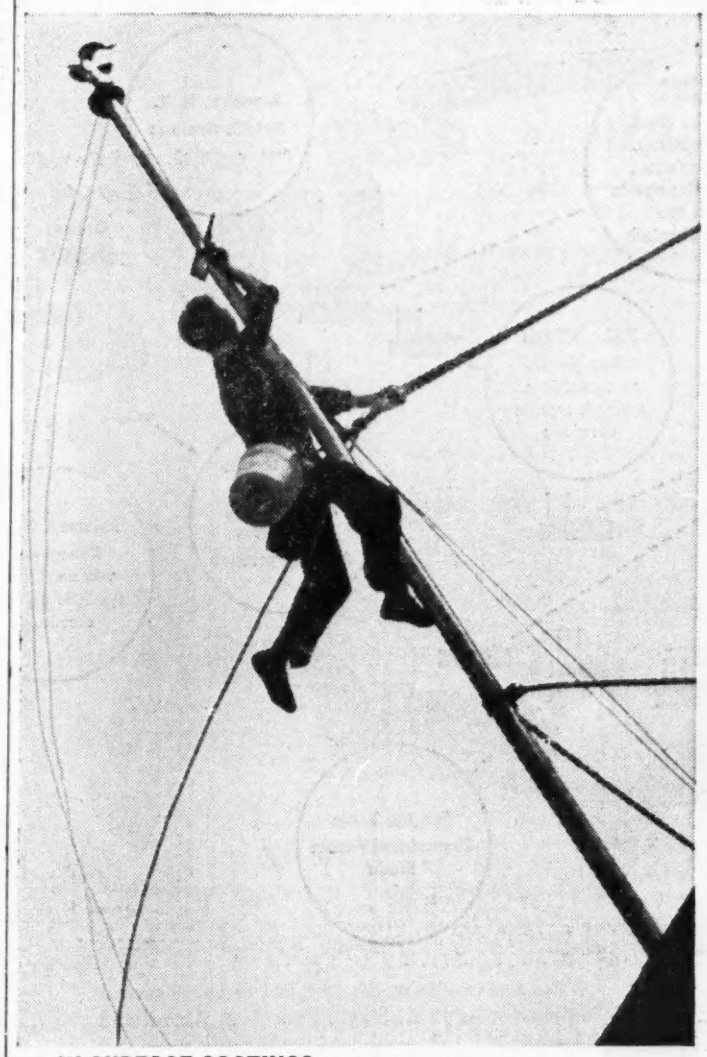
All these problems are so related that, at times, it is hard to see the end of one and the beginning of the next.

I spoke of industries that are worried about nuclear developments, not because they may be utilized in war, but because the industries may be late in the race to use nuclear energy. We, too, are in this race because new technics lead to unknown requirements that are bound to our technical growth with a Gordian Knot.

Race for Scientific Talent

The next problem requires real thinking—big thinking—and now. We are also in the race among industries for talent, the fight for the limited number of science graduates coming out of our schools. Here again, our industry must be on the alert.

Enjay assures you top product quality



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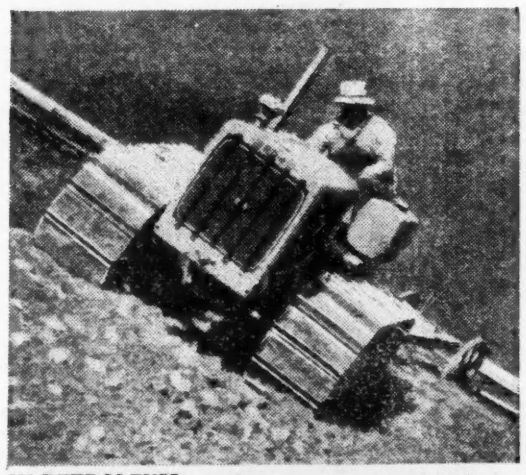
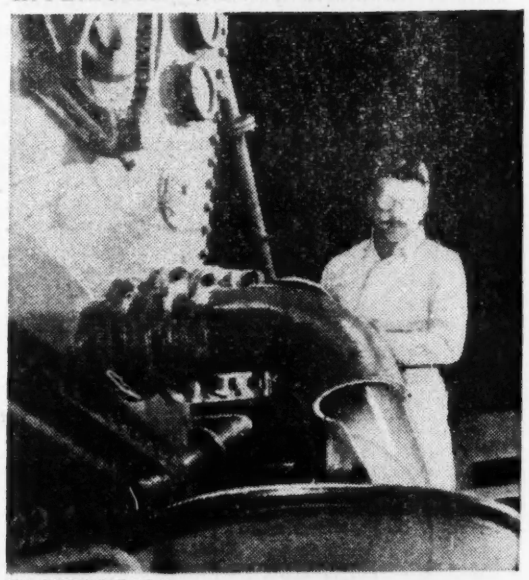
You can depend on Enjay for the quality ingredients that make your product a sales success. Enjay offers a complete line of petroleum chemicals to the surface coating, chemical and petroleum industries . . . backed by 35 years of research, know-how and proved results. Enjay is also ready to assist you in developing new or improved products through chemistry. Next time, call Enjay for *your* chemical needs.



IN PETROLEUM (*Lubricants and Gasoline Additives*)



IN CHEMICALS (*Plastics*)

PETROLEUM
PARANOX
PARATONE
PARAFLOW
PARAPOID
PARADYNE
PARATAC
PETROHOL
Methyl Ethyl Ketone
Dewaxing Aid
Ethyl Ether
Isopropyl Ether
Reference Fuels

SURFACE COATING
PETROHOL 91
PETROHOL 95
PETROHOL 99
JAYSOL
Secondary Butyl Alcohol
Secondary Butyl Acetate
Isopropyl Acetate
Acetone
Methyl Ethyl Ketone
Dicyclopentadiene
Ethyl Ether
Isopropyl Ether
Naphthenic Acids
Iso-Octyl Alcohol
Decyl Alcohol
Denatured Ethyl Alcohol

CHEMICAL
PETROHOL 91
PETROHOL 95
PETROHOL 99
JAYSOL
Iso-Octyl Alcohol
Decyl Alcohol
Denatured Ethyl Alcohol
Tridecyl Alcohol
Dicyclopentadiene
Isoprene
Butadiene
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Benzene
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ENJAY

35 successful years of leadership in serving industry

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We were not as prepared to meet the problem as we should have been.

There is an advantage, in speaking to an audience such as this, for no problem is new to you, no problem is a bolt out of the blue. We seem to get a lucky hunch and have some parts of the answers ready or in the test tubes of our laboratories.

We have long known that in any big industry a function of management is to think big—to think and look, say, fifteen years ahead. We will be in business for many future fifteen year periods. We all realize that we will be competing more and more with other technical industries. It's almost useless to try to imagine what sort of product they or we will be making and selling fifteen years from today, but we can be sure it will be entirely different from what we have today.

Automobile people don't dare predict whether or not they will be working on higher compression gas engines, or miraculous new Diesels—fussing with jets or trying out the first atomic engine. They don't guess because they know that their researchers have a way of following their noses and the automobile executives follow their researchers and they both think big!

But they know that it is common sense to corral the young researchers. A standard function of vice-presidents is to be sure to hire now the brains that will be designing their products then.

Industry Is Termed Basic

Now, I want to make the point that we are a big industry — a chemical industry — but we must put on an additional burst of speed in this race for technical talent.

Our product, actually, has analogies with steel. Steel, by all classical views, is considered the basic industry in that all manufacturing, all industry, small and large, building and consumer goods, requires steel. Statistics for steel have long served as the stock markets' temperature reading.

But our product, too, is a basic industry. Iron, in most of its forms, must be coated with one of our products before it can fulfill its role. While its molecular structure is hard, yet it disintegrates on contact with one drop of water.

Except when iron surfaces are protected by lubrication, most iron must receive a chemical coating before it can be used. The world marvels at the towering bridges which our engineers erect over rivers, but the picture is never complete without a small figure up there in the clouds. A man on a scaffold swinging a paint brush.

In a sense, it isn't iron until it is coated. The same is true of wood. We have a many million dollar wood industry and that part of wood that goes into the construction of houses and buildings without our chemical coatings is estimated at only 20 percent. Therefore, our products too are basic — even though they are highly developed chemical compounds, tightly controlled during production . . . and they are growing more and more complex with each new development in every other industry.

I present the proposition that we must do what all great industries do — make provision for much more basic research. How can we do this — there is only one answer — we must capture our share of the technical graduates coming out of the schools each year.

Maybe the next is not a problem — nor a sleeper. A couple of years ago, when atomic physicists first came forth with the radioactive isotope, practically every major industry spotted this little "tracer" as a detective which could help them find hidden answers to unsolved problems.

The steel people were fascinated with the promise of what these little tracers might tell them about steel behavior made with varying alloys when under a dozen forms of stress. Biologists, chemists and engineers also saw a sudden promise of fresh, new answers to some of their age old questions.

Dr. Manov and Howard Gottlieb of the Bjorksten Research Laboratories saw the same promise for our industry. They drew up a list of research problems where isotopes might supply some of our hidden answers.

That list is impressive because of its length, impressive for the number of fields in which we can use these little "tracers."

Here are only a few:

Diffusion of sea water through marine paints.

Determining trace impurities in paint ingredients.

Settling of paint in storage.

Measuring thickness of paint film.

Measuring the mechanical wear of paint and varnish coatings.

Determining the continuity of coatings.

Determining the cleanliness of a metal surface prior to painting.

Role of driers in paint.

Use of isotopes in place of radium in luminous paints.

Increasing Need for Researchers

No one in this audience need be told that our country has known a golden era of research in the years since World War II. Since the defeat of Germany and Japan, we have made more progress in physics and chemistry than in previous centuries. The strides are of such magnitude that industry is running short of a prime raw material—enough researchers to keep abreast of developments.

As I see our problem, we must set up machinery which will provide us with research talent as dependable as the machinery which provides us with ready-mixed paints.

We must organize to capture, if not the cream of the crop, at least a fair share of each year's quota of graduates. You executives know all about this problem because you are in the thick of the hiring race right now. Since universities simply are not providing enough Grade-A graduates, the race will become more intense. The paint, varnish and lacquer industry, your companies and our local associations must step up their programs. I shall do so with the help of our educational committee.

Think of the technical problems—the competitive products problems — that must be solved by the scientific men of the future. Then think big as to your responsibility to assure an adequate supply of these men—fifteen years from now. You have a real duty and a personal responsibility to devote time and effort to solve this problem.

I was tempted to discuss today the main projects that occupied your Washington office during the year, but thought best to print my detailed report separately for you and speak now of only one. I refer to the latest inning in a twenty-three year campaign to get the government out of the paint business. The navy was all set and willing to quit last month but they . . . and we . . . just received a setback from a congressional committee.

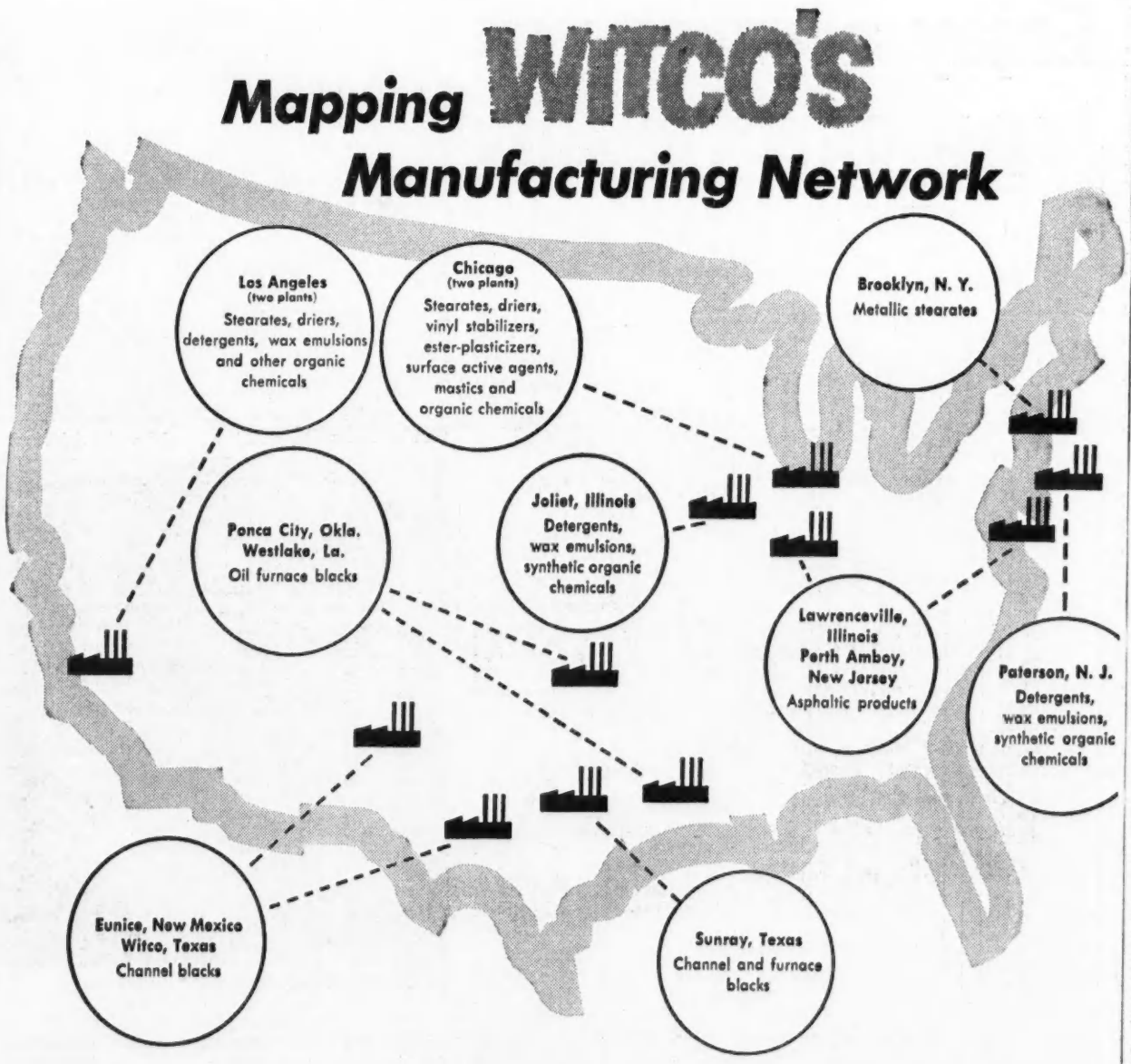
Hoover Commission Findings

As you know, the administration's policy is to stop government competition with private industry. The Hoover commission discovered a long list of government-owned and operated plants, many unknown to the public, some operating even without the awareness of congress. It will take some time to perfect the legislation to close all of them.

However, in the case of navy manufacture of paint and the operation of thirteen other business type activities, we had a unanimous verdict against continuing them. The Defense department itself announced that these fourteen activities . . . paint production included . . . must stop. The Bureau of the Budget reached the same policy conclusion. There followed agreement by the Department of Commerce and by the Secretary of the Navy, and repeated condemnation and directives from the President himself.

Unexpectedly, last June, a few congressional diehards inserted a provision in the defense appropriations bill that requires the Defense department to justify any discontinuation of manufacturing and servicing activities to the senate and house appropriations committees. The same provision gave authority to these two committees to reverse a directive of the executive department for such discontinuation.

The President as you know replied that this action is an infringement of the executive power and will not be honored. Following this statement, the Defense de-



Witco, and its affiliated companies, now operate a network of 14 plants, manufacturing a variety of chemicals and chemical products for a host of industries – including paint, rubber, lubricants, printing inks, plastics, cosmetics, drugs, foods, construction, textiles and paper.

Witco also maintains research and technical service laboratories in Chicago, Brooklyn, Akron and Amarillo.

Witco's 35-year history has been one of expansion, to keep pace with customers' needs, and diversification into related chemical industries.

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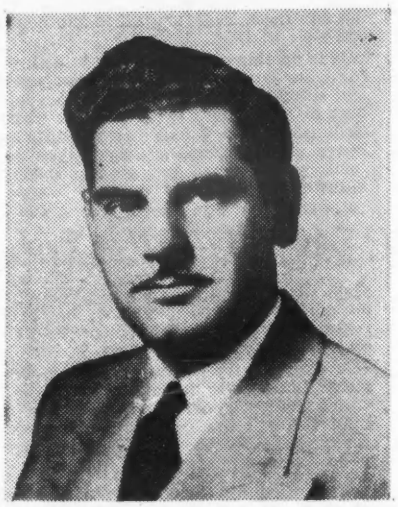

H. Braith Davis, president of the H. B. Davis Company, Baltimore, Md., was elected for another year as association treasurer.

partment notified the congressional committees of its plan to discontinue manufacturing in fourteen fields . . . including the manufacture of paint.

Senate Committee's Action

The senate committee concurred in all except the Boston rope walk but the house committee asked that all action be suspended, pending further hearings despite the fact that it has held many such hearings in the past—the latest was last year, the committee reporting only this year. All recommended discontinuing paint manufacture by the government.

Here is an example of invasion by one branch of government in the jurisdiction of another . . . for reasons which are not difficult to understand. As one congressman said: "Why! The paint plant employs thirty people! They would become unemployed."

This situation now provides the executive department with the opportunity to take a stand and end government competition in areas where industry can provide the product. I am confident this will be done.

Gentlemen, it is always pleasant when I can report good times. With one notable exception, we can say that in Washington there is nothing to be gravely concerned about . . . and I am sure you are ahead of me and know that I speak of the President's illness . . . the man who comes so close to being the bi-partisan President, Gen. Eisenhower. And even here the gloom is not what it was because that stout heart is mending, and he is recovering with the prayers and the blessing of all Americans and all free peoples of the world.

And if we look elsewhere in Washington, toward the buildings which house the departments that shape so much of the future, the picture is almost unbelievably good.

Business Ahead Seen Good

In fact, we face what I believe to be such good business, such a zoom in the economy, such tall statistical ceilings, that the only problem, as I tried to say earlier, is simply to keep up with the surge, to think big, gentlemen, because the entire world of industry is thinking big. It's a nice sort of problem to have.

Just look around your nation's capital. The Federal Reserve Board tells us that money in circulation is the greatest in American history and, while private debt, that is, deferred payment purchasing, is at an all time high, I can find no economist, conservative or liberal, who is seriously worried.

That leads us to another part of town, to the Federal Housing Administration, the multi-billion dollar agency which, with the Federal Reserve, controls the valve on the volume of construction. Here too, you have a body of economists working, advising the President, and therefore the nation, that we are nowhere near the ceiling on housing, that they are going to lay more housing footings in the next ten years than even in the past incredible decade.

Let's go a few blocks farther south to the Department of Commerce where another batch of economists spend days studying charts. Here too we have a corps of the toughest economists you can locate, and these men can't find a reason to challenge the figures which point to an era almost unbelievably bright.

Travel a couple of miles south and we find the Corps of Army Engineers planning dams to take care of an agriculture which . . . hold on to your seats . . . is calculated to double within the next twenty years the entire agriculture output of today. And, since we are taking this tour of the departments and shape our fortunes, let's stop at the Internal Revenue.

Lower Taxes Are Predicted

Even here, the picture is good. There seems to be agreement that we are going to have lower taxes. One might ask how . . . in view of the enormous appropriations. The answer lies in the fact that the country is producing more. All of us are making and selling more. There are more corporations coming into being, more individuals going into business. This means more turnover, larger payrolls, more salaries . . . all of which is another way of saying we are getting more taxpayers and bigger taxpayers.

Despite the fact that we must still pay $40,000,000,000 a year for our military forces and those of our allies . . . the economy is taking it. The national debt is increasing, but the gross national product is increasing faster. We are within sight of the time, I believe, when we can cut taxes a little and still make a start at retiring the debt.

Since we have mentioned the biggest single expense of government—the armed forces . . . we might swing over to the departments of Mr. Charles E. Wilson and Mr. John Foster Dulles who, between them, handle the foreign policy of the United States. I say between them, because, gentlemen, while it is Mr. Dulles who is the Secretary of State, and in charge of our foreign relations, I doubt that he could present our point of view so eloquently if he weren't backed up by that strong outfit under Charles Wilson, the armed forces of the United States.

And here, too, we can be optimistic.

Russian Aims Seen Unchanged

I have yet to find a man who believes that a tiger can change his stripes. Likewise, I have talked to no columnist, no cabinet member, no member of our congress who thinks Russia has changed its basic objective of communizing the world.

Furthermore, gentlemen, it is almost the unanimous opinion in our State department, the Defense department and congress, that Russia does not want war . . . a belief that Russia wants to continue its age old political undermining . . . its political spread, but without taking on war in the atomic era.

If this is so, and many intelligent men believe it is, we are in for a new kind of war . . . years of word war, political war, a contest between economic systems and standards of freedom . . . but years where we need not tremble at the sound of planes overhead, for the simple reason that the Russians have so much more to fear than we.

So, while no one would buy the malarky about the new smiling Russia changing goals, it is conceivable that we have reached a peak in armament, and that we may continue to maintain, say, a 50 percent lead over Russia and still achieve, in time, a little cut in the military budget.

You remember that just a year ago, when we met in our convention in Chicago, we were living in anxiety over the possibility that we would be involved in war over the Matsu Islands.

War No Longer a Fear

Subsequent events can be taken, I believe, to mean that we have made some tiny progress in the field of world peace, and that we need no longer carry the fear of war. Nevertheless, we still have much to do to attain our goal of political freedom for all peoples.

The expansion of our industry necessitates a great deal of planning and study. As in all well operated organizations this can only be done by the wholehearted cooperation of many people.

I cannot close my remarks without commending the members of the executive committee, the budget and finance committee and the many chairmen and members of committees who have worked so

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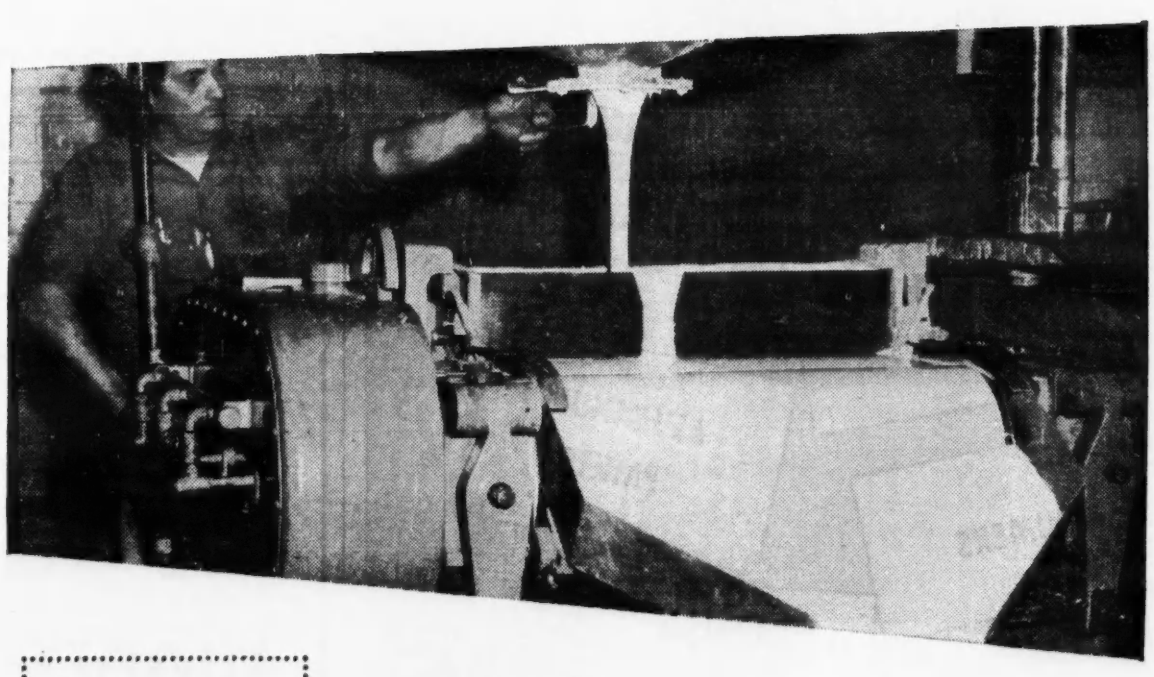

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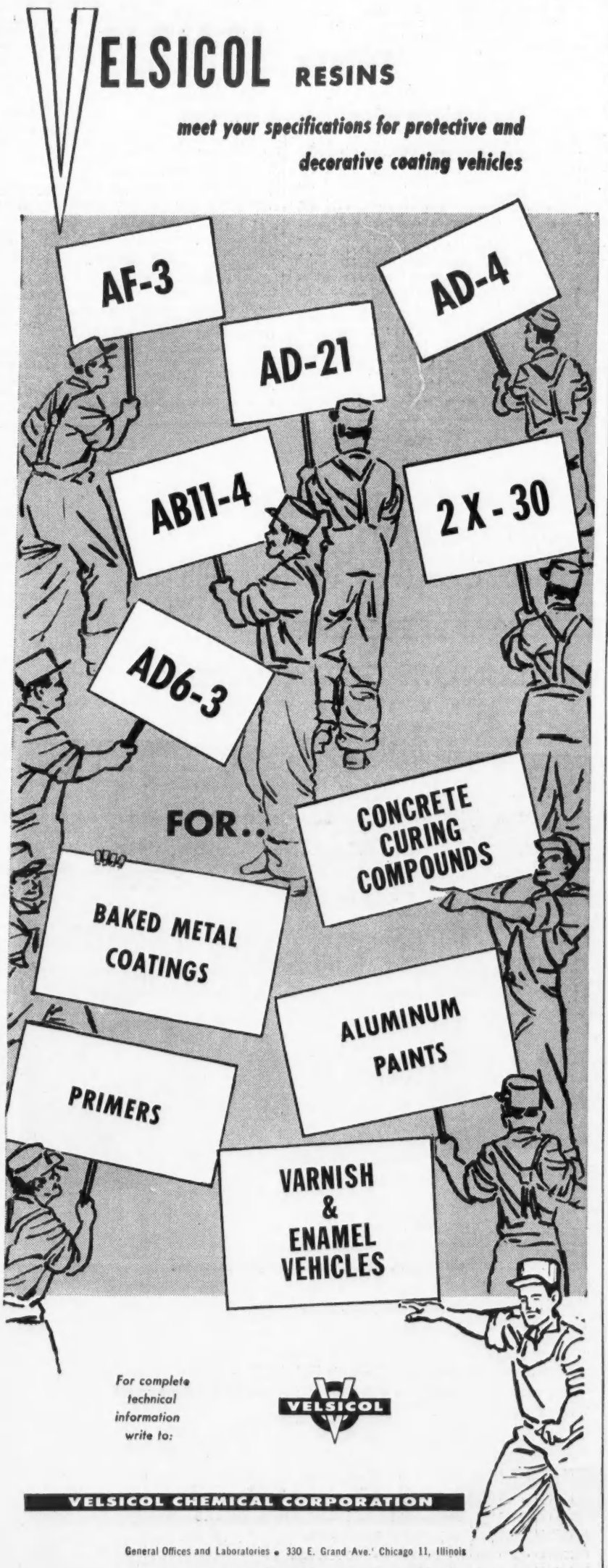

diligently for the benefit of the entire industry. It is a striking example of unselfishness.

And to the members of my staff, I also pay due recognition for their usual efficient and valuable untiring efforts to give service to our members.

Gentlemen, it is always a happy hour when one can conclude on a note of optimism. Today, we can, without stretching any facts, look forward to another record year in 1956.

It is on this note that I say "thank you" for your usual outstanding cooperation and splendid support, and to wish you the best of good times while you are visiting in Washington. I look forward to a year hence when we meet and again record our further progress to a $2,000,000,000 industry.

Papers by FPVPC Affiliated Clubs

These technical papers were presented by affiliated clubs of the Federation of Paint and Varnish Production Clubs at the federation's thirty-third annual meeting in New York last month.

Color Matching in Production—Part 1

New York Club

For years it has been more said than practiced in the paint industry, that batches of paint should always be matched by the tinter comparing the standard and the sample "under a north light." From a practical standpoint, this is not done often enough, and frequently when an honest effort is made, true "north daylight" is actually not available.

For example, if there is a red brick building near the north windows of the factory, the quality of the daylight would be affected by reflection from the red wall. Location of the plant will also have an effect. The farther the sun's rays have to travel, and the more dust there is in the air, the more scattered become the blue and purple regions of the daylight spectrum become, while the long red and yellow regions of the spectrum come through. The yellow and red evening sunsets are a good example, and indicate why north light is not always true "north daylight."

Use of Artificial Daylight

In developing a satisfactory artificial light source, it was found that the visible spectrum of normal daylight represents a curve indicating that the energy is relatively low in the violet region. This energy increases to a maximum in the green region, drops off slowly in the yellow and orange region, and fluctuates in the red region, finally dropping off sharply at the end of the visible spectrum.

A daylight fluorescent lamp presents a curve that, while somewhat lower in the violet region, closely approximates daylight through the blue, green and yellow regions, but drops off sharply in the yellow-orange and red regions.

On the other hand, a regular incandescent lamp is low in the short wavelength areas, but builds up to a maximum in the red region. From the above, it appeared that if a daylight fluorescent lamp were augmented with an incandescent lamp of suitable intensity, an artificial light source sufficiently close to north daylight might be developed, since the intensities are additive.

Avoid Too Much Light

In color matching it is important not to have too much light, because a too intense light prevents the operator from seeing small differences in light shades of paint. In order to eliminate any side effects of the illumination, a booth closed on three sides should be used. To prevent glare and eye strain, it was found that the walls and ceiling of the box should not be too bright or too dark. Experiments indicated that a neutral gray color of approximately 5.0 of the Munsell Neutral Scale was about right. This booth paint should, of course, be low sheen having a maximum 60° gloss of 5 and a maximum 85° gloss of 10.

Lights used in this booth should consist of four fifteen-watt daylight fluorescent lights augmented with two sixty-watt frosted incandescent lights. Wiring should be arranged so that one set of two fifteen-watt fluorescents and a sixty-watt incandescent lamp can be switched off, while leaving the other on. One set gives about

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the right illumination for viewing light shades, and both sets for viewing deep shades. To avoid loss of light intensity, the committee felt that, even though no bulbs burn out, the lamps should be replaced every six to nine months. Several booths were built and good correlation was found to exist between observations made by the same operator in several booths, or by different operators in the same booth.

Effect of Modifiers on the Chemical Resistance of Vinyl Films

Northwestern Club

The well-known chemical resistance of vinyl resin must often be compromised by the addition of modifying materials, in order to make the vinyl film usable. Straight vinyl resin films lack adhesion, have poor film formation, are extremely brittle, and offer poor application characteristics. This makes it practical and necessary to modify the film with other materials which will provide the characteristics lacking in the straight vinyl resin.

The purpose of this study was to determine the effect of these modifying agents on the chemical resistance of the final usable film. This did not involve the addition of a constant amount of modifier in each material tested, but rather tests were conducted on vinyl films containing an amount of modifier such as would be encountered in practical paint formulations.

In order to test a wide number of modifying agents for their effect on chemical resistance, it was necessary to select a vinyl resin having wide compatability characteristics with other materials, rather than to work with a resin with restricted compatability. It was also important that only one vinyl resin be used so that this would be constant, and only the modifier varied. Accordingly, "Vinylite VAGH" was chosen for this work.

Modifiers Tested

The following resins and plasticizers were tested at the listed percentages of the vehicle solids:

1. Alkyd resin, TT-R-266, Type 1 at 20 percent, 50 percent and 75 percent.
2. A twenty-five gallon oil length Bakelite BR-254/tung oil varnish at 10 percent, 25 percent and 50 percent.
3. A twenty-five gallon oil length ester gum/linseed oil varnish at 10 percent, 25 percent and 50 percent.
4. Chlorinated diphenyl, "Arochlor 1254" at 10 percent, 25 percent and 50 percent.
5. Dioctyl phthalate at 10 percent, 25 percent and 40 percent.
6. Tricresyl phosphate at 10 percent, 25 percent and 40 percent.
7. Polymeric plasticizer, "Paraplex G-60" at 10 percent, 20 percent and 30 percent.
8. Acrylic polymer, "Acryloid B-72" at 10 percent, 50 percent and 75 percent.

Pigmented finishes were made with these modified vehicles all designed to contain one and one quarter pounds of titanium dioxide per one pound of vehicle solids. The finished paints were adjusted to spraying viscosity with the addition of as little solvent as possible.

Test Procedure

Steel panels were spray coated to one and one half to two mils in film thickness, and after two weeks drying were suspended in the chemical for resistance to attack. The following chemicals were used:

1. 10 Percent sodium hydroxide solution.
2. 10 Percent hydrochloric acid.
3. Gasoline MIL-H-3136, Type 111.
4. 5 Percent solution of sodium hypochlorite (a commercial bleach).
5. 10 Percent acetic acid.
6. Linseed fatty acids.
7. 1 Percent solution of synthetic detergent ("Tide").

Test results indicated that the choice of the best modifier is dependent upon what chemical one wants to resist. For example, alkyd resin or ester gum varnish modifiers are no good in alkali resistance, but excellent in gasoline resistance.

Chlorinated Diphenyl Best Modifier

In general, it could be said that alkyd and oleoresinous varnishes are not good vinyl resin modifiers, phenolic resin tung oil varnish being better than alkyds. Monomeric plasticizers, such as tricresyl phosphate and dioctyl phthalate, were fair in alkali resistance, poor in acid, or hypochlorite, and medium against other chemical agents. The "Paraplex" was generally better than the monomeric plasticizers. At high percentage ratios, the acrylic polymer was quite good, except in hydrochloric acid and acetic acid. Overall, except for poor gasoline resistance, the best all around modifier appeared to be the chlorinated diphenyl.

Comparative Evaporation Rates of Paint Solvents

New York Club

Every paint chemist recognizes that the rate at which solvents evaporate from a paint film is quite an important factor affecting such product characteristics as drying time, flow, application properties and ultimate film appearance. Methods for measuring the evaporation rate of solvents exist in many forms in both the paint and the petroleum industries. However, there has as yet been no universally accepted or standardized method. It is the purpose of this paper, and the work that it represents, to be the first step toward bringing about such an universal standard method of test.

Among the three most common methods of evaporation rate determination now in use are the following:

An apparatus which is a modified Jolly balance consisting of a small pan attached to a coil spring mounted in an aluminum tube. The interior is kept at a constant temperature. A sufficient amount of the sample is added to cause the pan to sink to a predetermined level, and the rate at which the pan rises is an indication of the evaporation rate. This empirical test involves the use of a control sample of known volatility run alongside of the sample under test, and a comparison of the resulting curves.

Another method is to compare one sample with another under atmospheric conditions. The containers of samples revolve on a turntable in a tunnel at the end of which is a fan. The containers provide similar conditions of surface exposure and liquid depth.

Still another method involves the use of an accurately measured volume of 0.7 cc of liquid dispensed at uniform rate over a period of fifteen seconds onto a filter paper cone which is suspended from a calibrated steel spring and rotated at 4 rpm. Air at 77° F. and having 0-5 percent relative humidity is passed over the cone at the rate of twenty-one liters per minute. Readings are made and the percent evaporation calculated.

Factors Affecting Evaporation Rate

The boiling range of a thinner is not an accurate indication of its evaporation rate. Distillation ranges, or boiling points, do not represent evaporation rates but represent the temperature at which the vapor pressure of a thinner or solvent is the same as the atmospheric pressure.

Factors governing evaporation rates are:

1. The vapor pressure of the liquid at the temperature under consideration.
2. The rate at which heat is supplied to the sample.
3. The conductivity of heat by the liquids in the sample.
4. The specific heat of the liquid.
5. The latent heat of evaporation of the liquid.
6. The degree of association of the molecules.
7. The surface tension of the liquid.
8. The molecular weight of the liquid.
9. The humidity of the atmosphere.
10. The rate at which the vapor adjacent to the liquid is removed.
11. The vapor density of the solvent.
12. The solvent power of the solvent.
13. With solvent mixtures: (a) The molecular attraction of one component for another, (b) the depression of the vapor pressure of one component by another, and (c) the viscosity, if the solute is a colloid.

Evaporation Rates Differ in Paint Film

The evaporation rate of a solvent from a film is influenced by the viscosity of the coating vehicle, and the film thickness. At first, the solvent molecules readily diffuse to the film surface. Internal resistance increases with increasing rigidity of the film as it dries, thus decreasing the rate of dif-

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fusion of solvent molecules to the film surface. Thus, the evaporation rate of solvents from a resin or resin-oil vehicle is increased throughout the entire evaporation period.

The committee did extensive work involving slight modifications of the Wetlaufer-Gregor method of determining evaporation rates volumetrically. Compressed air is passed through a drying media to remove all moisture. It is adjusted to 77° F. either by using a constant temperature room, or running the dry air through long lengths of copper tubing immersed in a constant temperature water bath. The rate of air flow is measured on a rotameter and controlled by a needle valve.

A 100 cc graduated centrifuge (preferably an evaporation rate tube made especially for the purpose by E. Macblett & Sons with ground glass stopper and side arm properly sealed in) containing 2 cc. of solvent is immersed in the water bath or set up in the constant temperature room. Cumene of 95 percent purity is used as the reference solvent. Dried air at constant temperature of 77° F. is passed through the tube, at a rate which will evaporate 2 cc of cumene to a residue of 0.05 cc in thirty minutes.

Against this, the test solvent is run at the same air rate. During the operation, at five different intervals the air flow is stopped, the tube turned in a vertical position, allowed to drain for one minute, and the solvent level read off the graduated tube. The tube, of course, should be calibrated before use, and the calibration curve kept for reference.

Effect of Condition Variations

Variation in rate of air flow changes the speed of evaporation but does not alter the shape of the curve. Increasing the temperature speeds the rate of evaporation, and vice versa. Increased humidity in the air speeds the evaporation rate of hydrophobic solvents. More or less than five readings will alter the test results.

A New Test for Determination of Oil Absorption

New England Club

Oil absorption tests as generally practiced in the paint industry are subject to such wide variations in personal judgment of the end-point as not to be very reproducible by the same operator. Accordingly, it cannot be expected that different operators will meet with much agreement in their test results.

The New England Club has evaluated various methods with a view toward getting a test method that might be adopted as standard by the industry. The club has been looking for a method that will not involve expensive equipment, that will be reasonably reproducible by different laboratories, and that will avoid errors of personal judgment as to the end-point.

Their work has culminated in a modification of Asbeck and Van Loo's Pigment Packing Factor procedure, which was reported in 1949. The modifications of this well-established procedure were two: First with respect to the method of dispersing the pigment to avoid its being ground, and second, the replacement of water by mercury as the media in measuring cake volume. This makes for greater accuracy and much greater speeds, and the end-point eliminates the personal factor by being determined electronically.

The Asbeck-Van Loo method disperses the pigment in the oil by shaking a container half full of steel balls on a Red Devil mixer, which is assumed to attain a degree of dispersion equivalent to an overnight run on a normal ball mill. Under this modified test method of the New England Club, the dispersion is effected by running the pigment and oil in an eight ounce glass jar half filled with glass beads at a rotation of 125 rpm for twenty minutes. This does not appreciably reduce the pigment particle size of large extender pigments. Hence, it provides a better control of the extender pigments as manufactured and supplied, at the raw material level.

The Asbeck-Van-Loo PPF determination employed uses water in the measurement of cake volume. The New England Club method utilizes a different apparatus employing a micrometer with electrical contacts to measure differential height due to cake within a fritted glass cell. Mercury is used as the liquid medium because it is a good conductor, and also because it has a high surface tension and does not tend to soak into any cracks that might develop in the pigment filter cake, and thus distort volume reading.

Repeated checks on determinations made by different operators on a wide variety of pigments indicated that the personal error is virtually eliminated by this method. The coefficient of variation in test results is on the order of 2 percent. The basic apparatus required to carry out the test may be constructed from low-cost components, and is available in almost any paint laboratory. The method is relatively fast, although it takes considerable time to run one test, so far as elapsed time is concerned. The consumption of actual "bench time" however, is not very great. Nevertheless, it is most economical from a time standpoint when several samples are run at the same time. It goes without saying, of course, that the fritted cell (through which the excess oil is filtered and in which the electronic micrometer readings are made) should be calibrated.

Preparation of Vinyl Acetate-Vinyl Stearate Emulsion Copolymers

CDIC Club

Increased interest in polyvinyl acetate as an emulsion vehicle in paints has reached major proportions in recent months. Whether for exterior or interior use, these dispersions are generally of one of two classes:—Internally plasticized, which are true copolymers; and post plasticized dispersions, in which the dispersion is a homopolymer and has to have a plasticizer added to it in paint formulation.

In using either of these types of emulsions, the paint formulator solves his individual problems of freeze-thaw stability, pH drift, low temperature film formation, etc., in various ways, without actually knowing too much about how these factors are affected by the technics and actual raw materials involved in making the basic polymer he is using.

The purpose of this study conducted by the Columbus technical committee of the CDIC Club was to provide the answer to some of these questions in so far as the polymeric emulsion itself is concerned. This report deals with the first phase of the problem having to do with the polymeric dispersion. A later study will deal with the various emulsion factors as they relate to pigmented paint systems, and will involve such things as water spotting and related film characteristics, correlating the film performance of the pigmented systems with the known physical and chemical characteristics of the latices.

The emulsion, or latex, of interest in this study was the internally plasticized type in which vinyl acetate and vinyl stearate were copolymerized, the vinyl stearate acting as the plasticizing comonomer. To study the effects of different factors affecting the performance of an emulsion, it was necessary to prepare the polymeric emulsions from the monomers, with controlled variables. The committee prepared some 350 different formulations having different ratios of vinyl acetate and vinyl stearate, using various combinations of surface active agents.

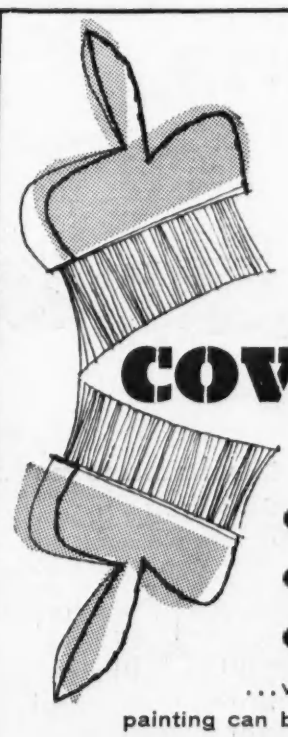
Surfactants Selected

The first job was to screen the many available surface active agents, singly and in combination, to see which ones best lent themselves to suitable copolymeric systems. The choice of surface active agents is extremely important because it has a direct effect on the rate and degree of polymerization, and also on the chemical stability of the emulsion. There is also sufficient evidence to indicate that the amount present has an effect on the water sensitivity of the latex film.

The sulfate or sulfonated (anionic) agents are stable in an acid medium or one in which decomposition acids are likely to form. Nonionic agents are stable in both acid or alkaline systems. The best selections were found to be combinations of surface active agents, and for this study the following systems were selected:—

1. A fatty amino compound plus the sodium salt of an alkyl-aryl ether sulfate.
2. A fatty amino compound plus the sodium sulfate of 7-ethyl-2-methyl undecanol-4.
3. A fatty amino compound plus a sulfonated fatty product.

These surface active agent combinations used in concentrations of 2, 4 and 6 percent at various ratios of monomers offer



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a wide pH variation in the final latices, which should lend considerable light to the pH drift in pigmented systems.

Ammonium persulfate was the catalyst used in all of these experiments because it is the most widely used, and is a generally satisfactory catalyst for surface active agent stabilized systems, giving a rapid rate of polymerization.

To eliminate any side effects from any ions that might be in ordinary water, only distilled water was used. This eliminated any unknown variables from this quarter.

The primary monomer used was vinyl acetate stabilized with hydroquinone, because hydroquinone does not greatly inhibit polymerization and it is not necessary to remove it from the monomer by distillation prior to the use of the monomer.

The secondary monomer was vinyl stearate having practically no unsaturation and an acid value of less than one. It was chosen because it can be produced cheaply from readily available animal fatty acids and has a monomer reactivity ratio favorable to the production of homogenous copolymers with vinyl acetate.

Aqueous dispersion of vinyl acetates are generally of two types:—(1) Coarse dispersions having resin particle sizes ranging from 0.5 to 2.0 microns, and (2) fine dispersions having resin particle sizes ranging from 0.05 to 2.0 microns. The type most generally sold for paint use, is the coarse, or type 1 material. It is characterized by extremely viscous or creamy consistency. Type 2 is generally very fluid and is recognized by its ability to scatter light.

Type 2 Dispersion Latices Made

In this investigation, the type 2 fine dispersion latices were made, because it was theorized that they would have such advantages as the formation of a stable latex, easier formation of a continuous film, increased gloss in clear or pigmented films, and would tolerate increased pigment volume concentrations.

Of the 350 latices made, various latex systems emerged, and the best of these, from a film standpoint, were selected for pigmentation studies at a later date. As the level of plasticizing vinyl stearate was changed, a new system developed, and each system was differently affected by the amount of type of surface active agent used with it.

Three different physical types of copolymer were received from each surface active agent system tested. Accordingly, a good cross section of copolymer latex types have been prepared. This is true not only as a result of the variation in the amount of plasticizing copolymer within a given surface active agent system, but in the variation of the type of copolymer received from each different surfactant system used. The effect of these variables will be correlated in pigmented paint systems as they relate to such properties as water spotting, low temperature film formation, and other problems presently confronting the polyvinyl acetate paint formulator.

Fire Retardant Paints
Baltimore Club

Work involved in this report was a continuation of the studies in fire retardant paints initiated last year. New studies involved the evaluation of different types of emulsion paints—polyvinyl acetate emulsions, acrylic emulsions, polystyrene-butadiene emulsions and a "Neoprene" emulsion.

The first series of tests were conducted to see if the previously established good effects of antimony oxide chlorinated organic plasticizers in oil carried over into emulsion paint systems. In addition, work was done in a preliminary way to determine whether or not fire retardant emulsion paint could be made using materials other than the antimony oxide/chlorinated paraffin combinations.

Results and Conclusions

The relationship with respect to fire retardant properties found to exist in oil type paints using antimony oxide and chlorinated paraffin, carry through the emulsion paint systems. However, it was found that the higher the content of chlorinated paraffin, the softer the films became. In the case of the "Neoprene" latex, no chlorinated paraffin was used, and excellent films were obtained using increasing amounts of antimony oxide.

Preliminary experiments with other materials were not entirely satisfactory because with increasing amounts of flame proofing agents, abnormal thickening of the paint resulted. The work suggested, however, that further experimental work should be done using organic phosphates, organic titanates, organic tin compounds, organic borates, and, possibly, organic zinc and antimony compounds.

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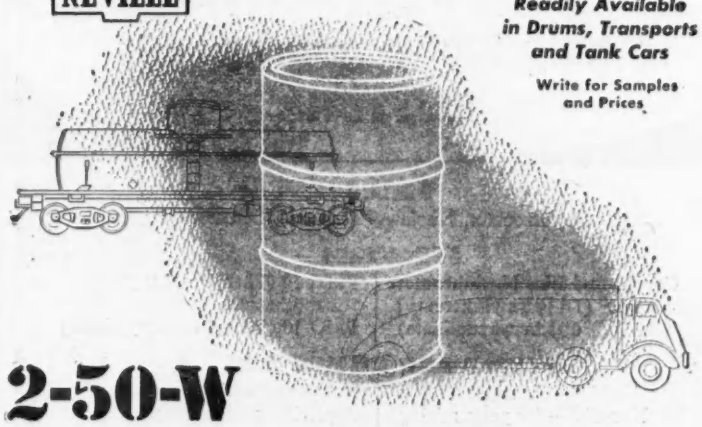

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Typical Properties	
Specific Gravity	.875
Distillation:	
Initial	158°C.
50%	170°C.
95%	185°C.
End Point (Dry)	191°C.
Flash Point, T.C.C.	105°F.
Color, Saybolt	+26
Acid Wash Color	8
Corrosion	Free from Corrosive Compounds
Kauri-Butanol Value	90
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Protective Coatings Materials

The market in prime pigments last week was generally firm, with no price movements reported other than those announced last October for chrome colors. These became effective November 1, representing a 1 cent advance over previous levels. One manufacturer is offering these materials at ½ cent below the prevailing quotations in consequence of prior contract commitments. Sales of aluminum paste and powders were a bit under the high volumes reported for the last few months. One supplier believed that this reflected a seasonal drop in paint sales. However, the drop is not of sufficient magnitude to indicate possible price movements. Thus far, aluminum pastes and powders have been holding firmly at levels established last August. Prices for lead and zinc pigments looked steady to firm last week and producers expect no changes in the near future.

Scarcity of lemon, superfine, and TN grades of shellac stimulated price advances of 1-4 cents in last week's trading. Lemon No. 1 was 3 cents above the previous quotation, No. 2 advanced 4 cents, while superfine and TN were up 1 cent. Importers are showing considerable interest in the latest Siam crop, which is expected to have a levelling effect on the market as soon as it reaches Calcutta. Prices of East India, Siam and Singapore dammar gums were reported firm at their recently advanced levels.

A major manufacturer of gypsum affirmed last week that the product was expected to remain oversold for at least another six months. Several suppliers are expanding their production facilities in an attempt to catch up with accelerating demand for gypsum. Inquiry for all plasticizers was said to be moving at normal levels last week. The only price movements noted were slight shadings for off-grades of dioctyl phtalate.

Accelerating demand from European markets strengthened casein last week, as Argentine casein edged up another one-half cent to a spread of 25½ cents to 26 cents per pound. Further price increases are reported likely by reliable sources.

Price Trends

Advanced

Casein, imp., Argentine, ½c. per lb.
Green, chrome, CP, dark, light, medium, blue content 1 to 15%, 2c. per lb.
16-30%, 1c. per lb.
31-45%, 1c. per lb.
45-49%, 1c. per lb.
Orange, chrome, C.P., 1c. per lb.
Molybdated, 1c. per lb.
Shellac, Lemon No. 1, 3c. per lb.
No. 2, 4c. per lb.
Superfine, 1c. per lb.
TN, 1c. per lb.
Yellow, chrome, C.P., 1c. per lb.
Zinc, bbls., 1c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
97.50	97.48	97.46	97.06

(For Current Prices see Page 9)

Prime Pigments

Aluminum Paste, Powder—Sales showed a slight dip over the high levels reported during the last few months. One observer felt that they would remain somewhat lower until spring, at which time increased paint sales usually stimulate greater demand for aluminum pigments. However, this seasonal drop in sales prevailing at present is generally not of sufficient magnitude to bring about price changes, according to informed sources. As long as the price of aluminum holds steady, producers of aluminum pigments foresee no price variations in store for their product. Aluminum paste is selling at 45c. and 65c. per pound for standard and extra-fine grades, respectively. The powder is quoted at $1.05½ for extra-fine and 75c for the standard grade. All prices reported are for sales in drums.

Carbon Blacks—Production of carbon black in September, 1955, declined to 148,303,000 from the 150,725,000 produced the previous month. Shipments of furnace blacks increased by about 5,000,000 pounds while contact black shipments dropped approximately 2,000,000 pounds.

The following figures, in thousands of pounds, indicate production, shipments, stocks, and exports of carbon black for September, 1955, with figures for August, 1955, and September, 1954, reported for comparison.

Production			
September, 1955	118,586	29,717	148,303
August, 1955	120,584	30,141	150,725
September, 1954	80,114	30,666	110,780
Shipments			
September, 1955	115,418	28,081	143,499
August, 1955	110,349	40,330	150,679
September, 1954	90,471	38,203	128,678
Stocks			
September, 1955	130,655	110,741	241,396
August, 1955	127,487	119,105	246,592
September, 1954	155,738	209,247	364,983
Exports			
September, 1955	*	*	*
August, 1955	19,985	19,529	39,514
September, 1954	17,876	16,790	34,666

*Not available.

Chrome Colors—The price advances of 1-1½c. announced last month were put into effect November 1 for chrome yellows and oranges, molybdate oranges, zinc yellows and chrome greens. One manufacturer is offering these materials at ½c. below the prevailing levels in consequence of prior contract commitments. Accordingly, prices on chrome colors are now spread as follows:—yellow chrome, 33c.-33½c. per pound; orange chrome, 33c.-33½c. per pound; orange molybdated, 46c.-46½c. per pound; yellow zinc, bbls., 27c.-27½c., and chrome greens 40c.-44c. per pound, according to shade and quantity.

Lead Pigments—Another week of high level sales at firm prices was reported by lead pigment producers. The outlook for this market appeared steady, as production facilities are adequate for present and anticipated consumption and no changes in the price of lead metal are expected.

Titanium Dioxide—Heavy consumption of this material has not let up, and, until facilities presently under construction are completed, the market is expected to remain tight. By the end of this year a major manufacturer expects to complete an expansion project under way at one of its plants. As a result, tightness in the material should begin to diminish by early 1956. Prices were steady with no probability of immediate changes.

Toluidine Red Toner — The price of $1.60 per pound on this material was holding steady last week. It was noted that, except for chrome colors, dry colors in general were unchanged. Buying is expected to continue at about present levels, and, with supply and demand fairly well balanced, no price fluctuations are anticipated in the coming weeks.

Zinc Pigments—With the price of zinc metal settled back to 13c. after a temporary ½c. rise, trading in zinc pigments was quiet and normal during the week. Anticipating no further fluctuations in zinc metal for the time being, pigment manufacturers foresee continued steadiness in their own market.

Fillers and Inerts

Barytes—Prices were still unchanged from earlier quotations, continuing a long record of stability. Material moved fairly well and was in adequate supply.

Gypsum—A major manufacturer reported that the oversold condition that has prevailed in this market for the last year and a half was not expected to loosen for at least another six months. At present, several suppliers are expanding their production facilities in an attempt to meet the accelerating demand resulting from increased house construction.

Lacquer Materials

Dioctyl Adipate—Inquiry for this product was affirmed to be moving at normal levels last week. Material was sufficient to cover consumer needs and appeared likely to continue so. Prices were steady to firm at current listings of 44½c. per pound in drum carlot quantities and 45½c., in l.c.l. shipments. Tank prices were 42½c. per pound.

Sebacates—Producers reported a good volume of sales during the week, with prices holding firm to steady. As sebacic acid and other raw materials show no signs pointing to price changes, sebacate makers assume that their prices will hold at current listings. Present supplies and production appear ample to meet consumer needs during the coming months.

Dioctyl sebacate prices are currently listed as follows: drums in carlot shipments, 60c. per pound; l.c.l. purchases,

For Late Market Developments, See Page 4

60½-61c. per pound; tanks, 58½c. per pound.

Synthetic Resins

The following figures show production in pounds for August, and list July's figures for comparison, as reported by the Tariff Commission:—

Production

	†August	†July
Phenolic and other tar acid resins:—		
Laminating resins	8.868.710	7.512.085
Adhesive resins	2.191.620	2.052.582
Protective coating resins, modified, unmodified, except by rosin	2.070.624	1.828.538
Urea and melamine resins:—		
Adhesive resins	10.514.097	7.807.416
Protective coating resins, straight, modified	3.338.641	2.648.863
Styrene resins:—		
Protective coating resins, straight, modified	8.317.078	6.952.245
Vinyl resins:—		
Total all types	57.022.155	54.628.239
Alkyd resins for protective coatings:—		
Phthalic anhydride types, unmodified	25.631.197	22.676.123
Modified with tar acids, rosin and or other materials, except styrene	7.681.721	7.078.195
Polybasic acid types except phthalic:—		
Unmodified	1.345.411	1.290.841
Modified with tar acids, rosin and or other materials, except styrene	609.611	622.301
Rosin modifications for protective coatings:—		
Rosin, rosin esters, unmodified (ester gums), esterfied with glycerol	1.498.899	1.313.359
Esterfied with other alcohols (pentaerythritol, glycols, etc.)	1.934.228	2.023.797
Rosin, rosin esters, modified:—		
Modifications with phenolic and other tar acid resins	1.550.926	2.467.107
Modifications with maleic and fumaric acids.	2.872.242	2.608.881
All other modifications.	2.880.764	3.889.464
Coumarone—indene and petroleum polymer resins	22.729.089	20.558.348
Miscellaneous synthetic plastics and resin materials:—		
Protective coating resins (including epichlorhodrin, acrylic, polyester, silicone and other resins)	293.180	318.902

†Partly estimated.
*Revised.

Alkyds—Record-breaking third quarter production has enabled producers to satisfy the consistently heavy demand for alkyd resins. No shortages in material or delays in shipment developed last week and prices looked firm at current listings. Sales are expected by industry sources to continue at present volumes through the remainder of the year.

Vinyl Resins—Makers found their production moving steadily in a well established market. Paint and varnish outlets continued to account for a fair percentage of sales, and except for one manufacturer, whose sales were considerably above prior expectations, producers developed no shortages of the material. No slackening of sales is expected until next summer, when seasonal slowdowns in paint and plastic manufacture are expected to have their usual effect on the market.

Natural Resins

Copal Gums—Although this market continued firm, maintenance of low inventories on the part of buyers kept prices steady and unchanged at present quotations.

Dammar Gums—Prices of East India pale Chips, Siam and Singapore dammars firmed at their recently advanced levels. Strength in dammar gums was attributed by an importer here to a changeover on the part of German industry toward greater use of natural resins. Other European countries and Japan were also mentioned as having increased their consumption significantly.

Shellac—Prices of lemon, superfine and TN grades responded to acute scarcity of supplies last week, with advances of 1-4c. reported. Lemon No. 1 was selling 3c. higher than previously, No. 2 was up 4c., while superfine and TN advanced 1c. Importers expect this firm trend to ease off as soon as material from Siam reaches the Calcutta market.

Miscellaneous

Casein—An exceptionally strong market, highlighted by accelerated European demand, pushed Argentine casein prices up another ½c. last week to a spread of 25½-26c. per pound, with further increases reported likely. What effect last week's devaluation of the peso will have on the market could not yet be ascertained. However, to avert any confusion that might result from the devaluation, the Argentine government halted all commerce last Tuesday for a two-day holiday, leaving buyers in suspense as to the probable outcome. One certainty shared by importers here is that casein will continue firming at least until next Spring, at which time some material may again be available from Europe.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Oct. 28	Mon. Oct. 31	Tues. Nov. 1	Wed. Nov. 2	Thur. Nov. 3
Drums—					
H	...	...	...	$8.47	...
I	...	...	...	8.47	...
K	$8.50	...	$8.50	8.47	...
M	8.50	...	8.50	...	...
N	...	$9.00	...	9.00	...
WG	8.52§	9.20	8.55	8.50	8.55
WW	8.60	9.40	8.65	...	8.62§
Bags—					
M	8.43	8.37½	8.40	...	...
N	...	...	8.45	...	...
WG	...	...	...	8.50	...
WW	...	...	8.75	8.60	...

Tankcars (for week ended Oct. 28)—

K or better, $8.24½; M or better, $8.16§; N, $8.20; WG, $8.35§.

Sales, USDA

1,172* 1,374* 593* 526* 890*

New York

(per 100 lbs., c.l., Friday)

B through N, $9.53; WG, $9.60; WW, $9.70.

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.558§	.56	...	.56	.559-.56
Sales	60,000¶	6,000¶	...	24,000¶	12,000¶

New York, Friday, per gal. 7 lbs., tankcars, 63½c., l.c.l. 75c.

*Drums equivalent. ¶Gallons. §Average price.

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Cellulose Acetate Butyrate

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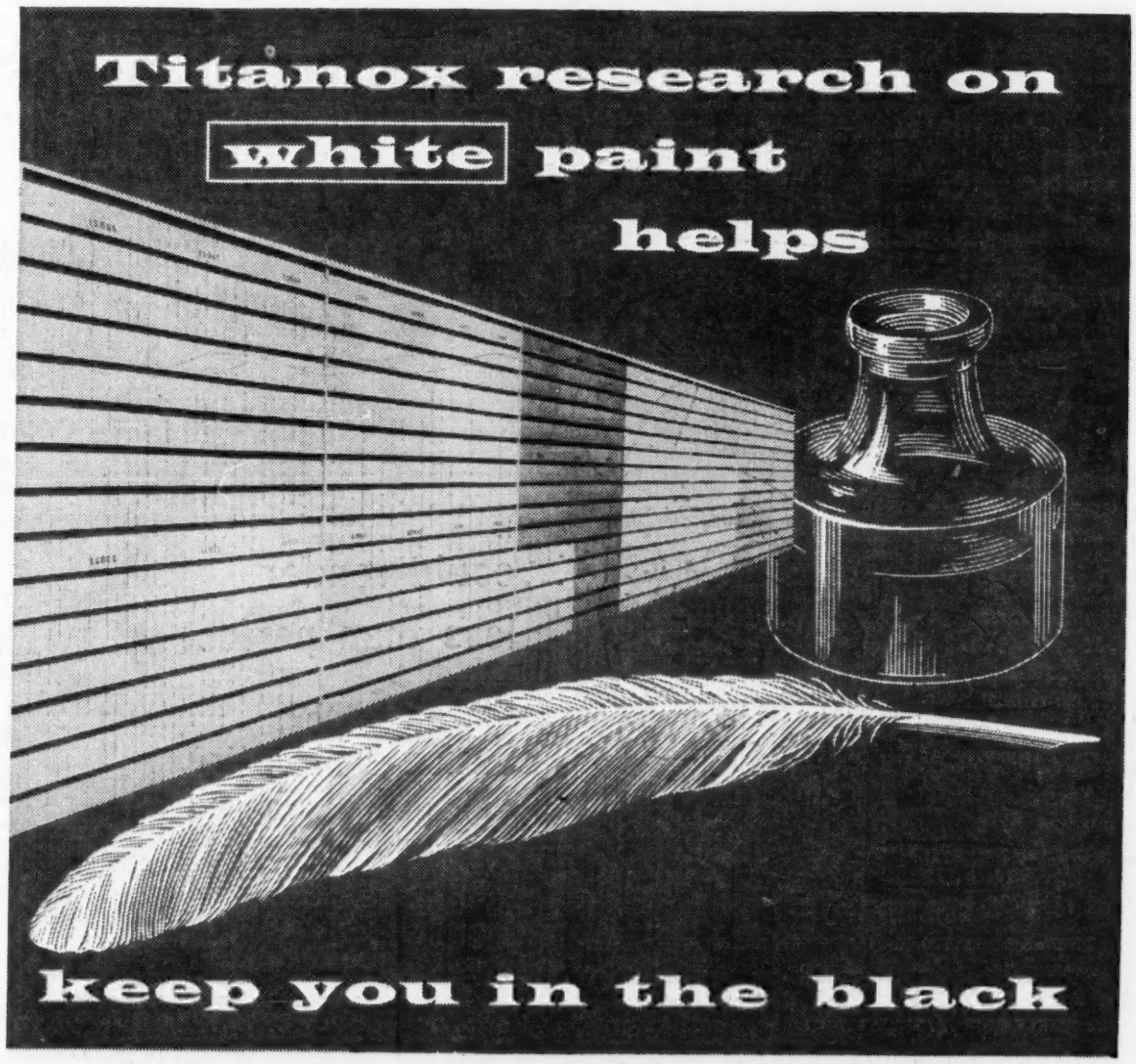

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Bakelite Names Manager Of Molding Materials Unit

Richard H. Bruce has been appointed manager of the molding materials division of Bakelite Company, a division of Union Carbide & Carbon Corporation, New York. In his new position Mr. Bruce will be responsible for the sale of the company's plastic molding materials for all purposes, including appliances, automotive, housewares, toys, packaging and industrial applications. Formerly eastern zone manager for molding materials, Mr. Bruce succeeds D. A. Munns, who is joining the market development department.

N.Y. Has New Paint Curb

New York City's Department of Health last week put into effect an ordinance making it illegal for anyone to "have, keep, offer for sale, sell or give away in the City of New York any paint containing more than 1 percent of lead" unless the paint can contains a warning label as follows:—"Contains lead. Harmful if eaten. Do not apply on toys, furniture or interior surfaces which might be chewed by children."

H. B. Prior, president of Prior Chemical Corporation, has been elected a director of Molybdenum Corporation of America, New York.

Allied Chemical Opens Two Agricultural Sales Offices

Two new sales offices for agricultural products have been opened by the nitrogen division of Allied Chemical & Dye Corporation, New York. One is at Kalamazoo, Mich., and the other at Columbia, Mo.

The Kalamazoo office, located at 511 East Paterson street, is shared with Allied's General Chemical Division. The Columbia office is located at 20A South 9th street.

Nitrogen division's Los Angeles office, which was opened a year ago, has been consolidated with the General Chemical Division Los Angeles office and moved to 2999 West 6th street.

Linseed Oil Restrictions Lifted by Uruguayan Gov't

The Uruguayan government moved to facilitate the exportation of its remaining stocks of linseed oil in a decree issued earlier this month. The decree lifted the restrictions on the exportation of linseed oil, meal, cakes and expellers and set the exchange rate for such transactions at 1.78 pesos to the dollar. Prohibitions against the exportation of flaxseed were also imposed in the decree.

Obituaries

Frederick P. Bernhard

Frederick P. Bernhard, retired controller of International Nickel Company of Canada, died October 30 in Summit, N. J. He was seventy-seven years old.

Mr. Bernhard began his career as a stenographer with International Nickel, serving with a subsidiary, Canadian Copper. He later became auditor and deputy controller, and in 1933 was named controller of Inco and its American subsidiary, International Nickel Company. He was also a director of Whitehead Metal Products Company, another subsidiary of Inco.

Claude A. Hanford

Claude A. Hanford, president of Pharmaco, Inc., Kenilworth, N. J., died during a heart operation November 3 at Georgetown University Hospital, Washington, D. C.

Active in drug industry affairs for a quarter of a century, Mr. Hanford was chairman of the Drug, Chemical and Allied Trades section of the New York Board of Trade in 1954-55, a director of the New York Board of Trade and a member of the executive committee of the Proprietary Association.

Funeral services will be held today at Knapp Colonial Home, 132 South Harrison street, East Orange, N. J. Interment will be at Restland Memorial Park in East Hanover, N. J.

Frederic Rosengarten

Frederic Rosengarten, retired chairman of the board of Merck & Co., Rahway, N. J., died October 28 in Philadelphia. He was seventy-eight years old.

Mr. Rosengarten entered the firm of Rosengarten & Son in 1905. That year the company acquired the Powers-Wightman pharmaceutical firm and Mr. Rosengarten became vice-president of the new concern, Powers-Wightman-Rosengarten Company.

In 1927 this company was merged with Merck and Mr. Rosengarten became chairman of the board. He retired in 1950, but continued as a director.

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LUBRICANTS—*Grease makers use Metasap Stearates because these outstanding soaps afford a wide range of quality bases that help producers to meet any grease specifications.*

PAPER, *Textiles, Cosmetics, Food Processing, and many other industries call upon Metasap Stearates to perform important services.*

Southern Chemist Award Will Go to Dr. MacKenzie

Dr. James Tucker MacKenzie, technical director of the American Cast Iron Pipe Company, Birmingham, Ala., and an international authority on the chemistry and metallurgy of cast iron, has been chosen to receive the 1955 southern chemist award of the American Chemical Society's Memphis section.

The gold medal, given annually for distinguished service to the profession of chemistry in the southern states, will be presented to Dr. MacKenzie at a banquet in the Columbia hotel, Columbia, S. C., on November 4 by Dr. Samuel F. Clark, professor of chemistry at the University of Mississippi and chairman of the Memphis section. The banquet will be a feature of the annual southeastern regional meeting of American Chemical Society local sections, to be held in Columbia November 3 through 5.

Paint Technicians Set Meeting

The Federation of Paint and Varnish Production Clubs has announced that it will hold its next annual meeting from Otober 21 through 24, 1956. The meeting will be held in Cincinnati, Ohio.

Glue Chart Is Offered by Borden

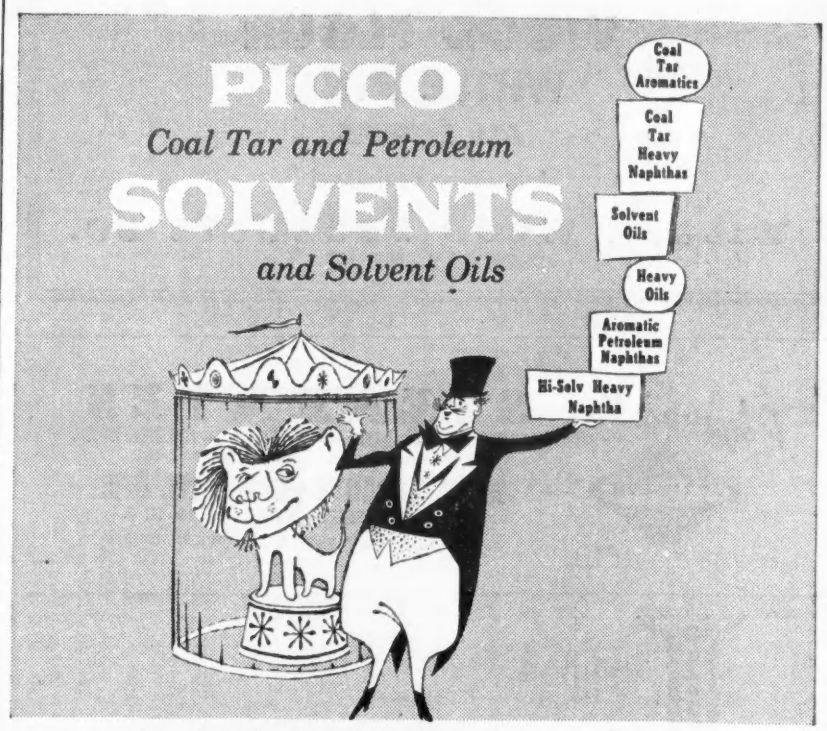
A new three-color chart outlining the uses and properties of the three types of "Elmer's" glues has been made available to hardware, paint and lumber dealers and distributors from the chemical division of Borden Company, New York, of the glues. Copies are available through distributors or on written request to the company's chemical division, 350 Madison avenue, New York 17.

SOCMA to Hear McFarland Of Gen'l Motors December 1

Dr. Kenneth McFarland, educational consultant for General Motors Corporation, Detroit, Mich., will be guest speaker at the annual meeting of the Synthetic Organic Chemical Manufacturers Association, to be held December 1 at the Statler hotel, New York. Dr. McFarland's talk will be entitled "Lamp Lighters." The business meeting will get under way at 5 p.m. with the reading of annual reports and the election of officers and board members. A reception will be held one hour later, with dinner following at 7 p.m.

Zonite to Change Its Name

Stockholders of Zonite Products Corporation, New Brunswick, N. J., last week gave their approval to the change of the company's name to Chemway Corporation. The name change will take place in a few months. The firm has also been reorganized into four separate divisions—Zonite Division, for proprietary drugs; Larvex Division, for household products; Crookes Laboratories, for ethical drugs, and Lady Esther Division, for cosmetics and toiletries.



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Sp. Gr. (60°F).....	.994	.995	.997
Flash °F.....	465	475	515
Pour °F.....	30	35	55
Viscosity 210°F, Saybolt Sec.....	107	137	307
Viscosity Index.....	—130	—130	—108
Distn. (1mm) °F			
5%.....	362	368	412
30%.....	431	435	514
Evapn. Loss mg/10g. (1 hr. oven 100°C)	5	5	4

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Leather Group Is Set Up To Study Testing Methods

The American Leather Chemists Association is joining forces with the American Society for Testing Materials in establishing a joint committee on development of leather standards. The organizing group includes M. Maeser, United Shoe Machinery Corporation; Malcolm Battles, A. C. Lawrence Company; Alfred M. Compton, E. F. Houghton & Co.; Joseph Kanagy, National Bureau of Standards; Arthur M. Kay, Howe's Leather Company; and R. J. Wirshing, General Motors Corporation.

This group, enlarged with representatives from several other interests in the leather industry, will meet again in the near future to complete the organization of a joint ALCA-ASTM Committee on leather. For the present, efforts will be limited to development of physical test methods.

NPVLA Convention Report

—*Continued from page 68*

bristles due to the non-flowing nature of the emulsion.

"4. Emulsions may be applied to damp surfaces but not cutbacks.

"5. Emulsions may be applied over oil paints as on metal roofs while cutbacks should not be applied unless the paint coat is quite aged.

"6. Emulsions do not penetrate into a porous surface or resaturate a dried out material like a roofing felt while some cutbacks do penetrate and resaturate the surfaces to which they are applied, especially in warm weather.

"7. Emulsions show a somewhat faster oxidation than asphalt cutback products and considerably faster than tar base products."

Election of Officers

Elected NPVLA regional vice-presidents were:—New England, Renshaw Smith, jr., president of Kyanize Paints, Inc., Boston; eastern, Dr. Gustave Klinkenstein, president of Maas & Waldstein Company, Newark, N. J.; central, G. R. Seidlitz, president of Seidlitz Paint & Varnish Company, Kansas City, Mo.

Southern, William E. Hood, president of Industrial Paint Manufacturing Company, Birmingham, Ala.; southwestern, R. W. Blair, jr., president of Jones-Blair Paint Company, Dallas, Tex., and western, J. Robert Campbell, vice-president of Cowman-Campbell Paint Company, Seattle, Wash.

Elected vice-president of the wholesale-distributors division was George C. Smullen, president of Charles H. Carland, Inc., Baltimore, Md.

The association elected six new executive committee members to serve for three-year terms. They are:—L. G. Backstrom, president of Cook Paint & Varnish Company, Kansas City, Mo.; B. M. Belcher, president of Benjamin Moore & Co., New York; W. P. F. Brawner, vice-president of W. P. Fuller & Co., San Francisco.

R. O. Clark, president of Jewel Paint & Varnish Company, Chicago; Paul R. Croll, assistant to the vice-president of Pittsburgh Plate Glass Company, Pittsburgh, Pa., and Harry E. Stone, president of American Lacquer & Solvents Company, Phoenixville, Pa.

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SPECIFICATIONS: (Resublimed). COLOR, white; SUBLIMATION min. 99% granular or lump, 98½% powder; WATER INSOLUBLE, none; HEAVY METALS, none; IRON CONTENT max. 0.01% (Sublimed). COLOR, light yellow to gray; SUBLIMATION min. 98% granular or lump, 97.5% powder; WATER INSOLUBLE max. 1.0%; HEAVY METALS, none; IRON CONTENT max. 0.05%.
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Oils, Fats and Waxes

Firmer tone developed in oils and fats last week and prices were fractionally higher for most materials. Trading was fairly active for prompt needs. Consumers, also continued to absorb heavy quantities against former orders and showed increased interest in later requirements. Cottonseed and soybean oils were higher, due to heavy demand for domestic and export. Crude coconut oil was easier, with copra.

Tallow and greases continued strong and were raised fractionally for all grades. Offerings were limited, with holders naming still higher prices. Domestic sales were reported moderate at the advance, while export interest became less active.

Improved consuming demand improved the tone of industrial oils. While new business in linseed oil was light, the movement against current contracts continued in good volume. Tung oil was stronger and raised fractionally for November delivery due to limited available stocks, while futures were without change. CCC last week sold 32 tankcars of tung oil (the monthly quota) and turned down bids for 47 additional cars.

Firmness of oticica oil for shipment stiffened the market locally and quotations were advanced fractionally. No. 1 Brazilian castor oil also was stronger and higher, reflecting the scarcity of offers from Brazil. Rapeseed oil was lifted fractionally for delivery during the balance of the year, while January forward was unchanged.

Feature of vegetable waxes was the sharp advance of yellow carnauba wax. Improved demand and light stocks caused the market to advance 4 to 5 cents per pound. Candelilla wax also was in limited supply and stronger reflecting the difficulty of obtaining replacements from Mexico as a result of flood conditions.

Vegetable Oils

Castor—Demand was moderate, chiefly for actual needs. Domestic grades were well held at former levels. No. 1 Brazilian was firm, advancing to 14½c. per pound, tankcars, New York.

Coconut—Crude was easier, with trading at 10¾c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 12¼c. New York basis.

Corn—Light trading was noted in crude at 11¾c. per pound, tankcars, f.o.b. mills. Refined was sold at 15¼c. per pound, tankcars, New York, prompt delivery.

Cottonseed—Bleachable cottonseed oil futures continued to display a steady tone last week. Price fluctuations were within narrow limits. Trading was quite active and mixed. Hedging sales were liberal, but were readily absorbed. The market reflected the strength of crude oil, which was in active demand for prompt and future delivery. Heavy trading was reported in the Valley and Texas. Sales took place at 11⅛c. per pound tankcars, southeast; 11c. in the Valley and 10¾c. to 11c. Texas, depending upon location. Interest in cash oil improved. Refined salad was firmer, advancing to 14⅝c. per pound, tankcars New York prompt delivery.

Refinel cottonseed oil consumption totaled 1,850 tankcars in September, against 1,913 in August and 2,849 in September last year. Consumption during August and September amounted to 3,763 tankcars, compared with 5,316 for the same period last year. Visible oil supply was estimated at 10,600 tankcars at the end of September against 20,686 at the same time last year.

The New York Produce Exchange has announced that open contracts in the exchange's cottonseed oil futures market exceed 2,000 contracts for the first time since April of 1953. The exchange attributed the increase to the fact that the government no longer finds it necessary to purchase cottonseed products at fixed prices over the actual market value in order to support cottonseed.

The Department of Agriculture has announced issuance of a purchase authorization to Peru for the purchase of up to $1,160,000 worth of cottonseed oil, soybean oil or lard.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended November 4 follow:—

	Sales	Cents per pound High	Low	Close
December	83	13.47	13.23	13.44@13.47
January	5	13.33	13.33	13.45@13.50
March	317	13.58	13.35	13.56@13.57
May	199	13.57	13.35	13.55S
July	129	13.54	13.35	13.51S
September	9	13.35	13.20	13.25@13.35
October	1	13.20	13.20	13.15@13.25

Total sales, 743 contracts.

Memph's.—Crude cottonseed oil was 10⅞c. bid for tankcars, Valley. Market steady Cottonseed meal offered at $54.50 per ton, sacked, Memphis; hulls, $5 per ton, bulk and $9, sacked, same basis, with trading fair.

Linseed—Trading was moderate chiefly for actual needs, though withdrawals continued in good volume. Quotations were unchanged, but could have been shaded for tankcar business. Raw oil was quoted at 12.7c. per pound, tankcars, Minneapolis, November and 12.5c., December-August.

Flaxseed—Stocks of flaxseed in all storage positions on October 1, totaled 43,400,000 bushels, according to the Crop Reporting Bureau, compared with 39,200,000 bushels a year ago and 40,400,000 bushels, October 1, 1953.

Minneapolis.—The flaxseed market continued quiet and featureless, even though crushers had advanced bids 5c. a bushel. Spot and to-arrive cash flaxseed at Minneapolis and Duluth was higher at $3.15 a bushel. Bookings of seed in the spot cash market amounted to 50 cars.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts 1955-56	Receipts 1954-55	Shipments 1955-56	Shipments 1954-55
Past week.	430,000	1,214,500	42,000	92,750
Since Sept.1.	10,150,000	13,835,250	1,172,500	2,812,250

Oiticica—Firmer tone prevailed in this market under improved demand and quotations were lifted fractionally. Tankcars

Price Trends

Advanced

Greases, ½c. per lb.
Oil, castor No. 1, Braz., ¼c. per lb.
Cottonseed, crude, ½c. per lb.
refd., ½c. per lb.
Oiticica, ¼c. per lb.
Rapeseed, ¼c. per lb.
Soybean, crude, ½c. per lb.
refd., ¼c. per lb.
Tung, ¼c. per lb.
Tallow, edible, ½c. per lb.
inedible, ½c. per lb.
Wax, candelilla, crude, 1c. per lb.
refd., 1c. per lb.
Carnauba, yellow, crude, 4c. to 5c. per lb.

Reduced

Copra, $2.50 per ton.
Oil, coconut, crude, ¼c. per lb.
Oleo, ¼c. per lb.
Oleo stearine, ¼c. per lb.
Soybean meal, $1.50 per ton.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 5, 1954
103.08	103.07	106.48	107.25

(For Current Prices see Page 9)

Cottonseed Crush: September

Cottonseed received and crushed and production of cottonseed products during September and August, 1955, as compiled by Bureau of the Census, follows:—

Cottonseed

	September (Tons)	August (Tons)
Receipts at mills	1,065,350	348,692
Crushed or used	494,196	212,310
Stocks at mills	916,780	345,446

Crude Oil

	September (Pounds)	August (Pounds)
Produced	159,431,000	70,391,000
Stocks at mills	42,616,000	23,386,000

Refined Oil

	September (Pounds)	August (Pounds)
Produced	96,846,000	57,996,000
Factory and warehouse stocks	[1]273,143,000	[1]287,292,000

Cake and Meal

	September (Tons)	August (Tons)
Produced	233,349	103,409
Stocks at mills	150,240	169,703

Hulls

	September (Tons)	August (Tons)
Produced	106,390	47,922
Stocks at mills	60,332	45,750

Linters

	September (Bales)	August (Bales)
Produced	[2]154,257	66,834
Stocks at mills	[2]92,600	77,223

[1] Includes 157,000,000 pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corporation. This figure, as well as the comparable August 31 figure of 168,000,000 pounds, include quantities sold for export by C.C.C. but not "lifted" but excludes quantities sold by C.C.C. for exports and being further refined. As of September 30, C.C.C. reported that it had removed from inventory and put in an "in-transit position to other storage" about 18,000,000 pounds of refined cottonseed oil, all of which has been accounted for in respondents reports to the Census Bureau.

[2] Average gross bale weight in pounds for September and August production respectively:—Total 616.7 and 608.3; first cut, 601.7 and 614.4; second cut, 622.6 and 619.6; and mill run 608.1 and 591.6.

For Late Market Developments, See Page 4

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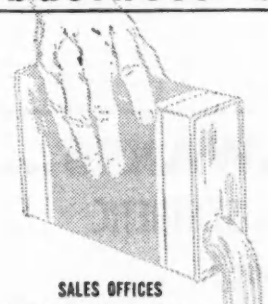
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FAC	.....	7 max.	7 max.	21 max.
Color 1¼" Col. Lov.	.....	30Y/3R max.	30Y/3R max.	.....
5¼" Col. Lov.	10Y/1R max.	.....	.....	.....
FFA (as oleic)	98-102%	97-101%	97-101%	95% min.
Acid No.	195-204	193-202%	193-202%	190 min.
Iodine No.	90-96	88-95	88-93	83-90
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Unsap.	1.0% max.	3% max.	2.5% max.	3% max.

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Color Gardner 1933	3	—	5
Unsaponifiable	3.0% max.		
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Acid Value	195	—	201
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ranged from 13¾c. to 14½c. per pound, New York, for prompt and later delivery, depending upon seller. Drums were higher at 15c. to 16c. per pound, according to quantity and seller.

Rapeseed — Refined was firmer and raised to 16c. per pound, New York, for November-December delivery. January-March was unchanged at 15¾c.

Soybean—Increased trading for refiners account and for export stiffened this market. Trading was reported active for prompt and future delivery. Crude was higher and sold at 11c. and 11⅛c. bid, tankcars, Decatur, November—first half December and 10¾c. bid, January-March, same basis. Refined salad was raised to 13⅞c. per pound, tankcars, New York, prompt delivery.

Consumption of crude soybean oil in September totaled 3,514 tankcars, compared with 3,758 in August and 2,825, September last year. Total for the 1954-55 season was indicated at 44,599 tankcars against 39,701 during the previous season. Visible oil supply was estimated at 5,534 tankcars at the end of September, compared with 2,759, a year ago.

Stocks of old soybeans in all storage positions in October 1, totaled 10,007,000 bushels, against 1,336,000 bushels, a year ago and 10,137,000 bushels, October 1, 1953. Soybeans crushed during September totaled 18,712,000 bushels compared with 19,891,000 bushels in August and 11,140,000 bushels in September, last year. Total crushed during the 1954-55 season ended September 30 was 249,001,000 bushels against 213,157,000 bushels during the 1953-54 season.

Sales and prices of crude soybean oil futures on the N. Y. Produce Exchange in tankcars (60,000 pounds) for the week ended November 4 follow:—

	Sales	Cents per pound High	Low	Close
December	15	10.90	10.75	10.98@11.00
March	14	10.85	10.62	10.83@10.85
May	28	10.75	10.42	10.75S
July	46	10.65	10.39	10.65S
September	4	10.28	10.27	10.34@10.45
October	4	10.15	10.15	10.03@10.20

Total sales, 111 contracts.

Tung—Market was stronger for prompt delivery due to the tight supply condition of November oil. Sales were reported up to 25½c. per pound, tankcars, New York, November, following previous business at 25c. December-January deliveries were available at 24¾c., same basis.

CCC last week sold 32 tankcars of tung at prices ranging from 23.55c. to 23.75c. per pound, f.o.b. Gulfport, Miss., according to quantity. Bids were received for 69 tankcars.

Price support for 1955 crop tung oil was announced at 20c. per pound by the Department of Agriculture last week and tung nuts at $51.06 per ton to growers. The 1954 support price for oil was 21.2c per pound and nuts, $54.96 per ton.

Miscellaneous

Castor Beans—This market was reported quiet. Shipments were nominal at $130 per ton, f.o.b. Brazilian ports.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds Beans	Oil
Last week	4,002,150	690,000
Previous week	102,000	1,434,000
Corresponding week, 1954	1,000,200	2,440,000
Total this year	69,230,060	37,299,000
Corresponding period, 1954	91,871,400	39,701,000

Cocoa Butter — This market was unchanged and steady at 55c. to 60c. per pound, spot, as to quantity.

Copra—Shipments were unsettled and lower at $152.50 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Prices were firmer and fractionally higher. Trading was moderate for domestic and export requirements. Yellow grease was higher at 7¾c. to 7⅞c. per pound, tankcars, delivered, as to acid; choice white all hog was nominal at 9¼c. to 9½c. per pound and not all hog, 8¾c. to 9c., same basis.

Lard—Market remained steady. Cash lard was unchanged at 11¾c. per pound, drums, Chicago.

Oleo Oil — With trading slow market was easier and nominal at 14¼c. to 14½c. per pound, drums as to quantity. Oleo stearine also was lower at 11c. to 11¼c. per pound, barrels, spot.

Tallow—This market was firmer and fractionally higher. Business was moderate for domestic delivery, but less active for export. Bleachable fancy was sold at 8⅝c. per pound, tankcars, delivered; extra, 8⅜c.; special, quoted at 8⅛c.; No. 1, 7¾c., same basis. Edible tallow was firmer at 10½c. per pound, same basis. Guaranteed fancy was raised to 10c. per pound, drums, f.a.s. and extra, 9⅝c., same basis.

Cake and Meal

Cottonseed Meal—Demand for meal was light but most mills have sold enough ahead not to be in any critical position on shipping instructions. Market was fairly steady. Buyers still operating on a hand-to-mouth basis. Meal, forty-one percent, was offered at $53 per ton Memphis, $53 Alabama, $55 Georgia and South Carolina mills, November-December shipment.

Linseed Meal—New business slow. Market continued easy.

Minneapolis.—The linseed meal market continued soft, although colder weather was expected to spur bookings. As yet, demand held light but shipping directions against old contracts were brisk. Jobbers appeared to be the most active. Extracted linseed meal, 36 percent protein, was quoted at $60 to $60.50 per short ton, bulk, in carlots, f.o.b., Minneapolis, near week's end. Resellers offered the meal somewhat cheaper. Expeller meal was nominal around $65 a ton, bulk, for November-December.

Shipments of linseed meal, in pounds, were as follows:—

	1955-56	1954-55
Past week	17,820,000	17,160,000
Since Sept. 1	160,621,000	131,220,000

Soybean Meal—Market for immediate shipment was easy but deferred shipments remained steady. Production seems to have exceeded somewhat the demand for spot shipment. Most processors are now operating at capacity. Meal, forty-four percent, unrestricted, was offered at $49.50 per ton immediate shipment; $52.50 November, $53.50 December, $54.50 January-forward, basis Decatur. Southeastern meal was quoted at $53 f.o.b. Mississippi Valley points for November-December.

Waxes

Beeswax—Firmness of crude grades continued to feature this market. Stocks here were scarce and African crude was quoted nominally at 66c. per pound, prompt delivery. Trading in refined grades was spotty, with prices unchanged and quite steady for all grades.

Candelilla—Stocks on spot were scarcer and higher. Crude was quoted nominally at 50c. to 52c. per pound and refined, 53c. to 55c., spot as to quantity. Replacements from Mexico have not been available during the past month owing to flood conditions in the Tampico area.

Carnauba—Feature of the market was the active demand for yellows and with stocks light, the market advanced 4c. to 5c. per pound, for spot material. Sales of No. 1 Ceara yellow were reported up to $1.08 per pound and Parnahyba, $1.10 to $1.12 per pound, depending upon quantity. Other grades were quiet and quotably unchanged.

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CARPENTER 20 S.S. HEAT EXCHANGERS — (2) 240-1"x8' tubes, STEEL SHELL, 500 SQ. FT.

BIRD CONT. CENTRIFUGE—36"x50" S.S. 304, COMPLETE.

NICKEL CLAD KETTLE, ASME JKTD. AGIT. 750 GALLON.

KETTLES, G/L, PFAUDLER, 200, 300, 500 & 1,000 GALLON.

BALL MILLS—25 to 1,000 gallon.
CENTRIFUGE—Troy, 17", monel.
CONDENSERS—8, all monel, 50 sq. ft. Shell & Tube. Expansion Joint.
DRYER, BUFFALO—Double Drum, 32" dia. x 90", reconditioned.
FILTER PRESSES—24", cast iron & heresite.
HEAT EXCHANGERS—188 sq. ft. S.S. 304 tubes, steel shell; 25 sq. ft. all S.S.
MIXERS—D. A. SIGMA, Jktd. Steel and S.S. 50, 60, & 200 gallon.
MIXERS—DRY POWDER, 400, 600, 1000, 1500, 2000, & 3000 lb.
ROTEX SIFTER—40"x84", 2 deck, 3 H.P.
TABLET PRESS—Stokes, RB1, complete.
TANKS—2, Steel, horizontal, 25,000 gallon; 10'6"x39', welded dished.

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Sharples Super Centrifuge 316 SS 2 HP exp.
Ertel 15" x 15" S/S Filter Press—brand new.
500 Gal. 316 S/S Reactor complete—like new.
Tolhurst 48" S/S' Centrifuge, exp. pf. mtr.
Day 5 gal. S/S jktd. vac. Mixer, sigma arms
Gen. American 42" x 120" twin drum dryer
Baker Perkins 100 gal. S S Mixer, 20 HP exp.
347 S/S Tank, 10½' x 21' 8" x ¼", 13,000 gals.

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OFFERS

DRYERS AND KILNS
Devine #12 & #23 Vac. Shelf Dryers.
Stokes 2'x6' Rotary Vac. Dryer.
2—Allbr. Nell 4x9 Atmos Drum Dryers.
1—Buffalo Vac. Drum Dryer. 24"x20"

CENTRIFUGALS AND CENTRIFUGES
4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter 12 Stainless covered leaves
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Sweetland & Oliver Filters.

KETTLES AND TANKS
Pfaudler 500 gal. Glass Lined Jack Reactor.
Pfaudler 250 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack Cl Vac Kettle.
2—Impreg. Units 30" & 36" dia. complete.
500 & 1,000 gal. closed Jack. Steel Kettles.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead lined Kettle.
Stainless, alum., copper. Glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
2—Mikro Pulverizers #2TH & #2SI.
Abbe 37"x30" chrome-mang. Ball Mill.
Patterson Pebble Mills, 6'x8', 6'x5', 30'x42".
Abbe 30"x30". Also Jar Mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #0, 18" hinged Hammer Mill.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
Buchanan 5"x12" Jaw Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40"
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ H.P. Colloid Mills.

MIXERS, SIFTERS & SCREENS
Lancaster 6' dia. Vert. Mixer 25 HP.
Kent 3 HP. continuous dry mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. spiral mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm mixers.
Read 80 qt. vert. mixer, 3 speed.
Orv. Simpson 20"x48" Rotex Sifter
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Kux 2½" dia. Tablet Machine.
Tablet Machines, Single Punch & Rotary.
Anderson & French Oil Expellers.
Kane 2 H.P. Gas Boilers, 200# pressure.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
Conveyors & Elevators.
Soap Machinery for Toilet, Laundry, etc.
Centrif., Rotary, Duplex & Triplex Pumps.

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LIQUIDATION
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TANKS
1—Pfaudler 5'x18' Horizontal glass lined, 2500 gal.
1—Pfaudler 78" x 96" Vert. Glass lined 2300 gal.
2—1500 gal. 316 S/S 5' x 9' Vert. 20 PSI.
1—7500 gal. 316 S/S clad 12' x 6' x 5'6" cone.
1—750 gal. 316 S/S 5' x 5' cone bottom.
3—4' diam. 316 S/S Conical Hoppers.
2—3' x 32" 316 S/S Conical Hopers.
1—2' x 3' Horizontal Closed 316 S/S.
1—2½' x 3½' Horizontal Closed 316 S/S.
2—3' x 3½' Horizontal Closed Nickel Clad
2—7' x 11' Vert. Steel Brick & Lead lined.
1—7' x 7'4" Vert. Steel Brick & Lead lined 50 psi.
1—6' x 6' Vert. Steel Brick & Lead Lined.
1—4' x 5'6" Vert. Steel Brick & Lead lined, 50 psi.
4—4' x 8' Hor. Steel ASME 25 psi.
1—4' x 5'6" Hor. Steel ASME 25 psi.
2—3' x 7' Vert. Steel ASME 25 psi.

PUMPS—CENTRIFUGAL
1—Lawrence Vert. 316 S/S 70 gpm 157' hd 20 HP.
1—Lawrence Vert. 316 S/S 55 gpm 107' hd 7½ HP.
2—Lawrence Vert. 316 S/S 50 gpm 107' hd 5 HP.
3—Karbate Series 5A 60 gpm 60' hd 5 HP.
9—Karbate new Impellers.
1—I.R. 1000 gpm Series 5CRVL 40 HP.
2—I.R. 1000 gpm Series 5CRVL 30 HP.
2—I.R. 650 gpm Series 5CRVL 30 HP.

CONVEYORS
3—Link Belt 316 S/S 18" x 12', 18" x 10' 18" x 7' twin screw.
1—Link Belt Steel 10" x 16' twin screw.
9—Link Belt 12" Troughing Belt Conveyors 15', 20', 30', 35', 45', 50' open and closed with drives and motors.

REACTOR—CONDENSERS
3—4' x 13' closed 316 S/S Reactors or Convertors with 109—3" x 6' 316 S/S tubes 150 psi.
1—Pfaudler 250 gal. Hastelloy C Reactor.
2—Pfaudler Monel Heat Exchanger 62 sq. ft.
9—Karbate Heat Exchangers 370, 188, 70, 16.4 sq. ft.

DRYERS
1—Buflovak 6'x5'6" Monel Drum Flakers NEW with drives and motors.
1—Rietz 30' "Thermoscrew" Conveyor Dryer 304 S/S NEW with drive & motor.

MISCELLANEOUS
1—I.R. Jet Refrigeration Unit complete 208 Tons 65.5° F. to 60° F.
1—I.R. Jet Refrigeration Unit complete 136 Tons 50° F. to 45° F.
1—Patterson 7'6" Conical Blender Rubber lined with drive & 15 HP motor.
2—Buffalo-Forge Fans 10,000 cfm at 7" S.P., 20 HP motor.
20—Link Belt Reducers and drives from ¾ HP to 15 HP.

* All motors are 3/60/440 V. explosion proof.

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DRYERS
2—Link Belt Roto-Louvre 7'5" x 20', 3'10" x 12'.
2—Hersey 4'x30', 3'x20' S/S Hot Air Rotary.
2—Struthers-Wells 5'x15' nickel Rotary Vacuum.
2—Buflovak 42"x120" Atmos. double drum.
1—Devine 2'x4' Vacuum Drum, 316 S/S.
1—Stokes 138H Vacuum Shelf with 10—44"x40" shelves.
3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac. 3'x15', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
1—Louisville Rotary Steam Tube 38"x25'.
5—Rotary Dryers 5'x30', 5'x40', 4½'x50', 6'x40', 6'x74'.

MIXERS
8—Day "Cincinnatus" double arm 660, 250, 100 and 50 gals.
3—Baker Perkins 100, 50 and 2 gal. double arm, jacketed.
4—Sprout Waldron S/S jacketed Powder 27 and 10 cu. ft.
2—Day "Jumbo" jacketed Powder 6'x12', 6'x18'.
1—Struthers-Wells 6'x9' S/S. Rotating, jacketed.
1—Patterson 6' dia. Steel Conical, with 7½ HP motor.

MILLS
1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
1—Patterson 3½'x4' steel Ball Mill.
1—Mikro Pulverizer #4TH.

CENTRIFUGES
1—Sharples PN14 Super-D-Canter, 316 S/S.
2—Sharples C-20, C-27, Super-D-Hydrators, 316 S/S.
3—Sharples P16 Monel and S/S. Pressurtite Super Centrifuges.
1—AT&M 40" Suspended rubber covered, perforated basket.
4—Tolhurst AT&M 40", 36", 32", Suspended steel, stainless.
1—Bird 40" Suspended, rubber covered, imperforate basket.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Tolhurst 26" suspended, rubber covered, perforated basket.

REACTORS, CONDENSERS, TOWERS, TANKS
1—2500 gal. 316 S/S jacketed, agitated Reactor.
8—4000 gal. 7'x14' Steel jacketed, agitated Kettles.
6—8000 gal. Steel Mixing Tanks with coils.
1—10'x16' Aluminum Tank, ½" shell, 10,000 gals.
2—Pfaudler 100 gal. glass lined, jacketed, agitated Reactors.
1—Buflovak 800 gal. 347 S/S jacketed, agitated Reactor.
5—S/S Towers 7'x25'6", 4'x30', 12"x14'.
25—Atmospheric S/S Heat Exchangers 715 & 477 sq. ft.
22—55 to 2400 sq. ft. S/S & Admiralty Heat Exchangers.

FILTERS
2—Oliver 8'x10' Monel Rotary Vacuum.
1—Swenson 4'x2' Nickel Rotary Vacuum.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Niagara 110-20 Filter with 12 S/S leaves.
2—#3 Sweetland S/S Filters, 12-25" dia. leaves 75 sq. ft.
5—#3, #5, #7, #10, #12 Sweetland Filters.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS
1—Foster Wheeler Dowtherm Unit 4½ million BTU.
4—Orville Simpson Rotex Sifters 40"x120", 40"x84", 20"x81".
6—Robinson, Sprout Waldron S/S Sifters 40"x84", single deck.
7—Stokes #DDS2 and "R" Tablet Presses.
3—Ball & Jewell #2, #1½ Rotary Cutters.
7—Nash Vacuum Pumps #H7, #H6, #L5, #L3, #4, #2.
2—Beechruss Model D Vacuum Pumps 50 cfm.
7—Durco S/S Centrifugal Pumps 1" to 3".

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JUST PURCHASED IN NEW JERSEY

1—Hardinge Conical Ball Mill, steel liner, 6' dia. x 22" long, with Feeder, Classifier and Dust Collector.

1—Hardinge XC-2 Ruggles Coles Rotary Steam Tube Dryer, 4' dia. x 30' long, with feeder, discharge screw and Dust Collector.

1—Sturtevant 8 x 10 Jaw Crusher.

Bucket Elevators, Screw Conveyor, Feed Hoppers with scales, Dust Collectors, etc.

LIQUIDATING AT CLOSED PLANTS

Equipment priced to sell prior to removal!

AT JERSEY CITY, N. J.

1—Fletcher 40" Imperf. Basket Susp. Centrifugal, Steel.
1—Bird Mach. Co. 24" #CH-208 Contin. Horiz. Centrifugal, steel, 15 HP motor.
1—Sweetland #5 Filter, 20 monel screens.
3—Rotary Dryers—5' D x 30' L; 4'6" D x 40' L; 3' D x 24' L.
2—Coffin 68 HP Steam Turbine Driven Centrifugal Water Pumps, 5" x 3"; 200 GPM.
1—Hardinge size B Constant Weight Feeder.

AT WESTMINSTER, MD.

1—Overton Mach. Model "C" Atm. Double Drum Dryer, 24" dia. x 60" long. UNUSED.
1—Louisville Rotary Type Paddle Screen, 36" x 18' L. UNUSED.
4—Steel Tanks—1000, 1800, 4000 & 13,000. UNUSED.
1—Conkey Triple Effect Evaporator, 1900 sq. ft. Herculoy Tubes, complete with pumps and piping. UNUSED.

AT BALTIMORE, MD.

1—Goslin-Birmingham Quadruple Effect Vertical, long tube Evaporator, total 6965 sq. ft. copper tubes.

AT WILMINGTON, DEL.

3—Ammonia Compressors: York 11 x 13, 150 HP; Frick 9 x 9, 75 HP, Frick 8 x 8, 50 HP.
1—Nash Hytor Air Compressor #MD-573, 10 HP.
7—Pfaudler Co. 6000 gal. Horizontal Bolted Glass Lined Tanks.

AT CARIBOU, ME.

1—5000 gal. Pressure or Vacuum Cooker wit hagitator, 6'6" D x 20' L.
1—Fitzpatrick model F-8, St. St. Comminuting Machine.
1—Jay Bee #4-W Hammer Mill, 75 HP.
1—Gruendler 36 x 24 Hammer Mill.
1—Coppus 75 HP Steam Turbine.
1—Industrial Filter, type EB, size 10 x 22.
2—300 gal. St. St. Water Jacketed Tanks.
1—All steel Heat Exchanger, 9 sections, total 3950 sq. ft., 2" tubes.
2—Centrifugal Pumps, 1000 GPM.
Lot Miscel. Pumps—Centrifugals, Steam Pumps and Aurora Turbine Pumps.
Lot Welded Steel Tanks—1000 gal. to 2100 gal. sizes.

NOTE—Plant in Caribou Me., is for sale or rent — 3 acres ground, 50,000 sq. ft. floor, river frontage, railroad siding, 540,000 gal. tank storage capacity, 425 HP boiler capacity.

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SEPARATOR-GAYCO 36" & 14' dia. w/ drives.

MIXERS—150 gal. lead—Lancaster EBG 3 (New)—Stokes, 13 gal.

SPENCER BLOWERS—150 CFM 16 oz. 270/24, 450 24, 1300 16.

PULVERIZERS—Jeffrey 20x24 Flextooth, & 30x42 style B Hammer mills, Bauer double attrition—2—10 H.P. Motors.

AUTOCLAVE—1 gal. s/s, 1000 psi, xpl. prf. gear motor.

PEBBLE MILLS—24x36 w/feeder, 4x5, 6x3 porcelain lined, 24x36 s/s ball mill w/ motor drives.

BUCKET ELEVATORS—4½x5½ (16') 8x16 (40')—8x18 (45').

VACUUM PUMPS—Nash Hytor MD673, 623, H7, Ingersoll Rand 16 CFM 2 stage.

CAR PULLER—3 HP capstan type—5000# capacity.

SCREENS—Tyler Hummer 3x5 (1 & 2)—4x5 (1) 3x10 (1).

HARDINGE MILLS—2'x8", 4½'x16", 6'x22", 7'x48".

CRUSHERS—Roll—18x18, 32x12, 30x16, 24x36 McLanahan single roll.

LAWLER COMPANY

LAWLER PLACE, METUCHEN, N. J.
LIBERTY 9-0243

SPECIALS

300 gal. STAINLESS PATTERSON KNEADERMASTER MIXER, sigma blades, 100 PSI jkt. and int.

(4) 30,000 gal. PROPANE TANKS, 200 PSI, ASME U68. (NEW).

CENTRIFUGES

Sharples Super Centrifuge.
Sharples C20, SS, Super-D-Hydrator.
Sharples C27, SS, Super-D-Hydrator.
Sharples PN14, SS, Super-D-Canter.

TOWERS

SS 18-8 Scrubber, 12"x15'.
SS 347 lined, Scrubber, 5'x18'.
6'x29' 21 trays, Stainless.
5'x24' 24 trays, Everdur.
7'x54' 20 trays, 150 PSI.
6'6"x40' 16 trays, 80 PSI.
3'x44' 18 trays, 300 PSI.
Karbate ±22, packed, 19"x12' NEW.
4'x59' 23 trays, 160 PSI.
7'6"x41'7" Reactor, 160 PSI.
4'6"x40' 13 trays, 180 PSI.
2'x47' 20 trays, 200 PSI.
2'x47' 20 trays, 375 PSI.
3'x49' 28 trays, 425 PSI.
2'x37' 16 trays, 250 PSI.
5'x36' Scrubber, 240 PSI.

MIXERS

100 gal. Readco, jktd. dbl. sigma blades.
170 gal. Ajax dbl. arm, power dump.
1050 gal. Paddle dbl. shaft heavy duty.
3900 gal. hor. jktd. 75 PSI paddle agitator.
29 cu. ft. Patterson Concial Blender.
27-10 cu. ft. SS Sprout Waldron Powder.
550 cu. ft. SS. jktd. rotating oscillating.

DRYERS

Roto-Louvre 705-20 SS heating coils comp.
Roto-Louvre 502-20 comp. w/furnace.
Roto-Louvre 310-12 heating coils, comp.
Rotary Vac. 5'x15' nickel clad.
Rotary Vac. 30"x8', Stokes 59AB.
Rotary 26"x8' oil fired with feeder.
Rotary 4'x27' oil fired, motor drive.
Rotary 5'x67' 6" lifters.
Rotary SS. 4'x30' Complete.
Rotary Kiln 8'x125'x¾" firing hood.
Rotary Kiln 10'x200'x¾" oil & gas burners, comb. chamber, dust collecting system.
SS Spray, 10'x36', gas fired.

MILLS

Raymond ±1 Automatic.
10'x48" Hardinge Ball Mill.
Raymond ±40 imp. Stainless.
5'x8' Kennedy Type M, w/disc feeder.
6'x8' Abbe & Patterson.

HEAT EXCHANGERS

Steel Tubes, 94 to 550 sq. ft. (5).
Adm. Tubes, 140 to 440 sq. ft. (7).
100 sq. ft. SS 40± shell 60± tubes.
198 sq. ft. steel 325± Adm. tubes 125±.
252 sq. ft. steel 400± shell 150± tubes.
415 sq. ft. steel shell 125± Adm. tubes 50±.
550 sq. ft. steel 325± shell 160± tubes.
1035 sq ft. steel 250± shell & tubes.
1800 sq. ft. steel shell Everdur tubes.
3300 sq. ft. steel 150± shell & tubes.

MISCELLANEOUS

PUMP—4000 GPM Peerless Deep Well 80' head NEW.
CENT. SEPARATORS—9', 5', 18".
GYRO SIFTER—72 sq. ft. 2-screen Robinson 28A.
BAG PACKER—Neuman, 50 to 100± bags.
CHURN—Baker Perkins 200 gal. work cap.

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Chemical Duty Cuts Would Shut

—Continued from page 3

Company, Cleveland, Ohio, protesting against the import duties imposed by Cuba on transparent sheeting of cellulose. The duty was increased over 300 percent in 1950, he reported, and is of no benefit to anyone. On the other hand, he contended it acts as a penalty on consumers of the sheeting in Cuba.

Clashing Testimony on Theobromine

Conflicting testimony was received by the Tariff Commission on the matter of the tariff on theobromine. In a brief filed with the commission, Walter Runge, president of Light Work Products, Inc., New York, warned that the present duty of 32½ cents a pound must be lowered if imports are to continue. He said that imports, which average 11,522 pounds a month in 1954, dropped to an average of 1,110 pounds during the first seven months of this year.

Taking an opposite stand, H. F. Shattuck of Monsanto Chemical Company, St. Louis, Mo., charged that imports of theobromine are having a disturbing effect on the domestic market and said that the output of his company is only about 50 percent of the plant capacity. He also strongly protested any reduction in US duties on caffeine, citing the big difference in wage rates between chemical workers in this country and those abroad.

In a brief filed with the commission, Kelco Company, San Diego, Calif., argued that instead of considering rate reductions on imports of alginates into the United States, the rate should be restored to its former level of 20 percent ad valorem.

Imports have risen steadily from 5,480 pounds in 1951, when the duty was decreased to 12½ percent, to an estimated 305,408 pounds this year, it was pointed out. The algin industry is an infant industry that is in the pioneer and development stage, and production and encouragement is essential if this domestic industry is to exist, the Kelco brief held.

The possibility of duty reductions on imports of sodium nitrite was protested in briefs by both E. I. duPont de Nemours & Co., Wilmington, Del., and Allied Chemical & Dye Corporation, New York. The two companies stressed the importance of this chemical for national defense.

They said that maintenance of the present duty of 4½ cents a pound is essential if the industry is to survive. duPont reported that its net profits on 1954 sales of sodium nitrite were less than 2 percent, which is abnormally low for a slow turnover chemical requiring a large investment.

Columbian Carbon Company, New York, opposed possible reductions in duties on iron oxide and iron hydroxide pigments. It's brief said that some of the pigments are already being imported into the United States at less than domestic production costs. Any further reduction in tariffs permitting further inroads on the American market, the company asserted, will "certainly impair" the $3,800,000 of capital investment it has in new plants and equipment since the war.

In other briefs filed with CRI protests were registered against duty reductions on vitamins, cream of tartar, caffeine, calomel and antibiotics by Chas. Pfizer & Co., Brooklyn, N. Y.; calcium hypochlorite by Pennsylvania Salt Manufacturing Company, Philadelphia, Columbia-Southern Chemical Corporation, Pittsburgh, and by Olin-Mathieson Chemical Corporation, New York, and on various plastics products by the Society of the Plastics Industry.

Diethylbarbituric Acid and Salts

Abbott Laboratories, North Chicago, Ill., opposed any duty reductions on imports of diethylbarbituric acid and salts and compounds, while the National Association of Glue Manufacturers warned that a further reduction in duties on animal glue valued less than 40 cents a pound would be fatal to the American glue industry.

Atlas Powder Company, Wilmington, Del., opposed any cuts in tariffs on activated carbons, while H. R. Stratfor of Morton Salt Company, Chicago, and W. L. Benger of International Salt Company, Scranton, Pa., asked that no change be made in existing duties on sodium chloride.

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Renegotiation Board Extends The Period for 'Stock Items'

The Renegotiation Board last week extended the period of exemption for so-called "stock items" from contract renegotiation until January 1, 1957, the date when the board's authority to renegotiate government contracts for the recapture of excessive profits expires.

The extension of the "stock items" exemption had been urged by the chemical industry through the Manufacturing Chemists Association and by many other industries and trade associations. The action just announced by the board was in answer to these many requests.

Exemption of "stock items" from renegotiation of contracts has been a usual practice of the board since the renegotiation act of 1948. However, the board failed to exercise its authority to continue the exemption when the renegotiation law was extended through 1956 by congress earlier this year.

The extension of the exemption just announced is made retroactive by the board to January 1, 1955, the date when the last extension expired.

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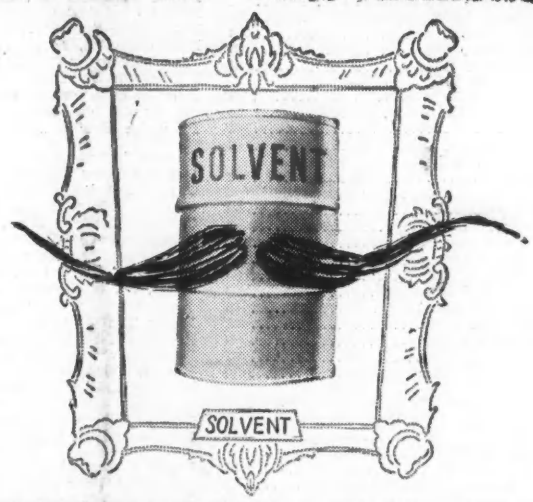

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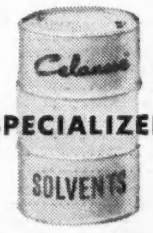

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